OFFICE OF SYSTEMS INTEGRATION

REQUEST FOR PROPOSAL OSI 7100-181 UNEMPLOYMENT INSURANCE MODERNIZATION PROJECT

uimod

SECTION 6B – SYSTEM ENGINEERING REQUIREMENTS

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ADDENDUM 1

ISSUED BY:

STATE OF CALIFORNIA

DEPARTMENT OF GENERAL SERVICES

TECHNOLOGY ACQUISITIONS SECTION

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6B SYSTEM ENGINEERING REQUIREMENTS

This Section begins with a discussion of requirements management and system engineering as established by the Unemployment Insurance Modernization (UIMOD) Project Office. The UIMOD Project Office has developed a Systems Engineering Management Plan (SEMP) which delineates how systems engineering and requirements management shall be conducted for the UIMOD Project as well as the relationship between the Contractor and the UIMOD Project Office regarding systems engineering. The requirements stated herein reflect how the UIMOD Project Office expects the Contractor to proceed through requirements analysis into design, development, testing, solution delivery, training and knowledge transfer, transition support, and production support.

The requirements contained in this Request for Proposal (RFP) are considered the baseline for the Project. The requirements have evolved from two original Feasibility Study Reports (Call Center Network Platform and Application Upgrade (CCNPAU) and Continued Claims Redesign (CCR). Two separate requirements definition Contractors refined the requirements and the UIMOD Project Office then merged the two sets of requirements for the purpose of this RFP.

6B.1   Technical Documentation

6B.1.1   Implementation Plan

The Implementation Plan is considered a cornerstone of the Project. In addition to using an iterative development methodology, the UIMOD Project is requiring incremental deliveries of functionality to the production environment. The UIMOD Project Office anticipates considerable collaboration in the plan's construction and on-going maintenance with attention being given particularly to high complexity components and early return on investment.

The Implementation Plan must be developed using the following guidelines:

1. The Implementation Plan should show how the system will deliver a return on investment as early in the project as possible.
2. The Implementation Plan should deliver solutions that cover as much of the technical infrastructure as quickly as possible without compromising the quality or inherent security of the solution. This will help the team validate the design and architecture as early as possible.
3. The Implementation Plan should expose technically challenging areas of the project area as soon as possible. Specifically, interfaces to the Single Client Database (SCDB) and data conversions should be deployed early in the Project.

4. The Implementation Plan should consider the logistics of procurement, installation, and acceptance testing of the hardware for the Call Centers and for the hosted environment.

5. The Implementation Plan should reflect the impact of the iterative development methodology and incremental deployment requirements as specified in the UIMOD SEMP, and outlined in this section of the RFP.

Requirement Number	Description	Bidder Agrees (Y/N)
1	The Contractor shall incorporate the implementation approach developed as part of the proposal into a comprehensive Implementation Plan. The implementation plan shall include the following: a) A system breakdown structure (see IEEE 1220-1998, section 4.10) showing all of the design elements from the detailed design allocated to discrete, deliverable components. b) A schedule of Checkpoint and Quality builds and Pre-Production releases, with the system components allocated to each build and release. c) A requirements traceability matrix showing the UIMOD system requirements allocated to each of the system components. d) A requirements traceability showing every system requirement allocated to a Pay Point (see Chapter 11 of the RFP)	
2	The Contractor shall produce updates to the Implementation Plan at each Quality Build as required. This update shall, at a minimum, address the following areas: a) The detailed description of the components (hardware and software) planned to be delivered with (at least) the next three releases b) The components from previous releases that have already been delivered. c) Changes identified from the previous Implementation Plan including changes to components, or changes to the build schedule. d) Any changes that affect the contents of the Requisite Pro database shall be submitted to the UIMOD project office.	
3	The Implementation Plan must deliver functionality to the Employment Development Department (EDD) in incremental pieces that are in logical business application sequence.	
4	The Implementation Plan must consider adequate training of the affected sites (both call centers and headquarters) is addressed.	
5	The Implementation Plan must facilitate EDD technical staff becoming proficient in newly introduced technologies as early in the project as possible.	
6	The Contractor shall certify that it will not disrupt current Emergency 911 services during implementation.	
7	The Contractor shall certify that during implementation and rollout, it will not impact any current production system availability.	

Requirement Number	Description	Bidder Agrees (Y/N)
8	The contractor shall work through the UIMOD Project Office to ensure that the other branches that will remain on the current call center platform will not be affected by the installation of the CCNPAU solution.	
9	The contractor shall work through the UIMOD Project Office to develop the deployment schedule of the new platform with the Adjudication Centers and Insurance Accounting Division (IAD) deployed first and then roll out to the current Call Centers. The current call center system will remain in operation throughout the implementation, in parallel operation until system acceptance.	
10	The contractor shall, at a minimum, build the Unified Call Distribution (UCD) with the same Interactive Voice Response (IVR) functionality as EDD's current IVR for the first deployment.	
11	The Contractor shall deliver a first release of the continued claims functionality for the internet and for the IVR that meets or exceeds the continued claims functionality offered by the Unemployment Insurance (UI) Branch at the time of contract award, as seen in the current process in which claimants submit a continued claims form (DE 4581) via the United States Postal Service (USPS).	
12	The first production deployment of CCNPAU equipment must at a minimum deploy two (2) Adjudication Centers.	
13	During deployment of the UCD system, transition of the 800 telephone service will be done using percent allocation. The contractor must work with EDD to receive a percentage of the calls from EDD's current 800 service until 100 percent of the calls are transitioned to the new platform. EDD will maintain control of the percentage allocation, in cooperation with the contractor. Call volume will be split between the two (2) systems on a percentage basis during periods of parallel operation with the new system.	

6B.1.2   Interface Management Plan

The UIMOD System will have many external interfaces; for this project "external interfaces" are defined as interfaces to systems that are outside of the scope and control of this Project. The Interface Management Plan will be used by the UIMOD Project to document the plan for integrating the UIMOD System with all systems external to UIMOD. The UIMOD Project envisions that both the IVR and web channels will be using the same software infrastructure to read and write data to external interfaces.

Requirement Number	Description	Bidder Agrees (Y/N)
14	The Contractor shall develop an Interface Management Plan that will, at a minimum, address the following areas:	

Requirement Number	Description	Bidder Agrees (Y/N)
	a) The approach to developing and managing external system interfaces. b) Technical tools that shall be used for data transformation, transport and error recovery. c) Tasks, deliverables and resources necessary to complete interface development and implementation. d) Description of how the UIMOD development and test systems shall work with the external non-production interfaces. e) References to applicable sections in the relevant design documents that describe how the UIMOD system shall be synchronized with the SCDB. f) References to applicable sections in the detailed design that describe the mappings between external system data and the UIMOD system data. g) Descriptions of the process for managing changes to the interfaces, both in the production and non-production environments. h) Interface(s) needed for maintaining data synchronization between an interim production solution and the final production implementation.	

6B.1.3   Capacity Plan

Requirement Number	Description	Bidder Agrees (Y/N)
15	Upon completion of the System Architecture Site Assessment, the Contractor shall update the Capacity Plan to include, at a minimum, the following areas: a) A description of how UIMOD capacity requirements will be met. b) How capacity issues shall be managed for all components of the UIMOD project. c) Descriptions of how capacity utilization will be monitored and capacity thresholds will be established. d) A description of corrective and escalation processes that will be used in the event any capacity thresholds are reached. e) A description of issues specific to CCNPAU will include: 　1. A description of how the proposed solution will give EDD the flexibility to increase or decrease the amount of call handling capacity that is purchased, depending on planned or unplanned variances in call loads. 　2. The plan for growth and management of Quality of Service (QoS) to standards for data network connected equipment. Maximum growth specifications shall not be less than 1.5 of the stated installed sizing. 　3. The plan for growth and management of individual	

Requirement Number	Description	Bidder Agrees (Y/N)
	call centers.	
	4. The plan for growth and management of new call centers.	

6B.1.4   Data Conversion Plan

The Data Conversion Plan will describe how the Contractor will manage the process of converting data from the legacy systems for use in the new system, and (as required) back into the legacy environment.

Requirement Number	Description	Bidder Agrees (Y/N)
16	The Contractor shall develop a Data Conversion Plan that will address, at a minimum, the following areas: a) A description of all data sources and data targets. b) A description of field mappings, tools, data validation and cleansing methods/algorithms, and any other software programs that will be used or will need to be written to support data conversion. A description of how converted data will be validated to be correct before use in the new production system. c) A description of the approach to converting legacy data to required formats. d) A description of the approach to synchronizing the data between the new system and legacy systems that will rely on updates provided by the new system. e) A description of how data anomalies and errors will be handled. f) A schedule of deliverables and resources needed to complete the conversion effort. g) Detailed descriptions of how the data conversion tools provided by the contractor will be operated for each phase of the CCR solution delivered to the Pre-production environment. h) How converted data will be delivered as required to support each phase of the CCR solution delivered to the pre-production and production environments. i) The processes for delivery of the software and hardware configuration information used in creating the converted data, at the time the data is delivered to the pre-production and production environments. j) A description of how the data reconciliation process will work.	

6B.1.5   Master System Test Plan

The Master System Test Plan is critical to the communication between the Contractor, the UIMOD Project Office and the EDD Information Technology Branch (ITB) , System Testing Group.

Requirement Number	Description	Bidder Agrees (Y/N)

17	The Contractor shall develop and maintain a Master Test Plan in accordance with IEEE 12207.1-1997, Paragraph 6.27, Test or Validation Plan and, as a minimum, address the following areas:
	 a) Define the test philosophy (including objectives, required levels or types of testing, and basic strategy).
	 b) Discuss the strategy to be used for creating and populating the test databases and maintaining the files during the iterative testing, and over the life of the project.
	 c) Describe testing for the Project, including:
	   1. How the testing shall satisfy specific objectives and demonstrate that the requirements are met.
	   2. How each phase of the testing is determined to be complete, and the formal reports/debriefings conducted for each phase of the testing.
	   3. The testing facilities, environment and specific testing tools to be used.
	   4. The processes and procedures that shall be used by the Contractor for releasing testing results, data reduction and analysis, and review of test results.
	 d) Identify all planned levels of testing (at a minimum: smoke, unit, integration, functional, performance, stress, regression, security, user acceptance as defined in section 6B.8.4 of the RFP), including:
	   1. Facilities/tools to be used.
	   2. Staff/resources.
	   3. Method for review of test cases and procedures.
	   4. Configuration management.
	   5. Procedures for releasing test results.
	   6. Test data refreshing.
	   7. Method of data traceability throughout each specific test plan.
	 e) Describe Final Acceptance Testing and User Sign-Off. Demonstrate that only necessary and sufficient testing is being performed, and that all requirements have been met that shall allow EDD to successfully move a tested delivery to the production environment.
	 f) Include a plan and deliverables for infrastructure/interoperability testing.
	 g) Include a plan and deliverables for security testing, including configuration and vulnerability testing.
	 h) Include a plan and deliverables for production readiness testing.
	 i) How data shall be saved and restored to provide the ability to synchronize all databases, system transactions/audit activity across	

Requirement Number	Description	Bidder Agrees (Y/N)
	all test environment system components.	
	j) The objectives of each testing phase, how each test shall be conducted to achieve that goal and how test results/variances/defects shall be tracked and reported.	
	k) A testing team that is operationally distinct from the development team that performs testing for each build and release.	
	l) Strategy for testing all hardware and software in compliance with existing UIMOD Project Office test acceptance processes.	
18	The Master Test Plan shall provide a detailed description of each test required to ensure that all of the system, interfaces, and components comply with the requirements and specifications. The Test types shall comply with the test types described in Section 6B.8 of this RFP.	

6B.1.6   Production Hardware/Software Inventory List

Requirement Number	Description	Bidder Agrees (Y/N)
19	The Contractor shall provide an inventory of hardware/software (HW/SW) as it is delivered and document changes in HW/SW after initial delivery.	
20	The HW/SW shall not be accepted until the Contractor has demonstrated that it can operate continuously under the load capacities indicated in the UIMOD Architectural Design Requirements (e.g. Final acceptance of HW/SW shall be contingent upon HW/SW burn-in and capacity testing).	

6B.1.7   Lessons Learned Reports

Requirement Number	Description	Bidder Agrees (Y/N)
21	Within 30 days of each deployment of new functionality to the production environment, the Contractor shall provide a "lessons learned" summary document and meet with the UIMOD Project Office to review the document and discuss process changes warranted by lessons learned.	

6B.1.8   Contractor Production Support and Transition Plan

The Contractor Production Support and Transition Plan will be the document that describes how the Contractor intends to support the System during the contractual period and transitions that support over to the responsible State entities.

Requirement Number	Description	Bidder Agrees (Y/N)
22	The Contractor shall develop a Contractor Production Support and Transition Plan that will address, as a minimum, the following topics: a) How the Contractor will maintain and operate the system during the contractual period when the system is partially and fully in production. b) How ownership and responsibility of the system shall be formally transferred to EDD up until the end of the contract engagement. c) The knowledge transfer activities that the contractor shall create to transfer system knowledge to the technical staff (from ITB and UIB) for understanding, in operating, and in maintaining the new system. d) The knowledge transfer activities that the contractor shall create to transfer system knowledge to the EDD Helpdesk staff is necessary for providing support to system users. e) How equipment, configurations, software, and data stores shall be transitioned into the State's production environment. f) Processes for documenting and approving contingency plans for all significant risks. g) Coordination activities with the hosting provider that provides a clear definition of data center responsibilities and tasks. h) The process for an orderly closeout of the Contract to include at a minimum the following areas: 1. Archiving project materials. 2. Business processes and system migration. 3. Post-mortem debriefings. 4. Preparation of a final report to include lessons learned and analysis of project objectives achieved. 5. Transfer of application operations and maintenance to new Contractor or State. 6. Transfer of all tools and licenses and/or related data needed to maintain the UIMOD application. 7. Delivery of current system and supporting documentation, including but not limited to all Deliverables specified in the contract. 8. Audit and reconciliation of all hardware and software purchased by the Contractor for the project. 9. Transfer of supporting project data to the State, including change requests, Help Desk requests, issues, and risks. 10. Support of the migration of business and technical processes and procedures to the State or its designee through knowledge transfer as approved by the State Project Manager to new Contractor or State staff. 11. Support of the State's Post Implementation Evaluation Report	

Requirement Number	Description	Bidder Agrees (Y/N)
	(PIER) process in accordance with the Department of Finance (DOF) Statewide Information Management Manual (SIMM). 12. Identification of Lessons Learned in accordance with the DOF PIER guidelines.	

6B.1.9   Operational Recovery Plan

Disaster recovery requirements relative to the physical systems, and planning for recovery from operational failures, are not the responsibility of the Contractor. However, the Contractor's knowledge of the system solution will enable them to help in EDD's business continuity and disaster recovery planning.

Requirement Number	Description	Bidder Agrees (Y/N)
23	The Contractor shall develop a Operational Recovery Plan that addresses the following: a) Areas of the UIMOD system most susceptible to failure or disaster that would result in downtime. b) Recommendations for system recovery processes, or steps to take in the event of a downtime event. c) Recommendations for EDD for comprehensively effectively mitigating the risk of a downtime event. d) Recommendations for securing the system during a period of emergency operation.	

6B.1.10 Software Re-Use and Governance Plans

Managing software resources that will be shared across the EDD enterprise are not the responsibility of the Contractor. However, the Contractor's knowledge of industry best practices and the UIMOD system solution will enable them to provide valuable recommendations to EDD.

Requirement Number	Description	Bidder Agrees (Y/N)
24	The Contractor shall create a Software Code Re-Use plan that describes industry best practices and the Contractor's recommendations for EDD towards maximizing software Code re-use in the UIMOD environment. This document will include specific references to UIMOD system components that may be re-used. This document must be delivered six (6) months prior to the final schedule for CCR production release.	

Requirement Number	Description	Bidder Agrees (Y/N)
25	The Contractor shall create a Service Governance plan that describes industry best practices and the Contractor's recommendations for EDD towards effectively governing enterprise service usage in the UIMOD environment. This document will include specific references to UIMOD enterprise services. This document must be delivered 12 months prior to the final schedule for CCR production release.	

6B.1.11 Production Release Plan

The release of solution components to Production is not the responsibility of the Contractor. However, the Contractor's knowledge of the system solution will enable them to create a Production Release Plan for EDD to use in moving the solution components into the Production environment.

Requirement Number	Description	Bidder Agrees (Y/N)
26	The Contractor shall develop a Production Release Plan that addresses, but is not limited to the following: a) Updated Configuration Information required to satisfy the EDD production configuration management requirements b) Updated System Architecture c) Updated Detailed Design, including detailed system technical and user documentation. d) Proposed deployment schedule	

6B.1.12 EDD Maintenance & Operation (M&O) Plan

After the UIMOD system is in full production and all production releases are accepted the UIMOD System will be turned over to the EDD for Maintenance and Operation (M&O). To prepare the EDD for this transition, the Contractor and the UIMOD Project Office will need to partner to develop and assimilate the EDD M&O operations team with an EDD M&O Plan.

Requirement Number	Description	Bidder Agrees (Y/N)
27	The Contractor shall develop a formal methodology (used by EDD to manage and operate the new system during EDD M&O) that is documented in the EDD M&O Plan.	
28	The Contractor shall replace all other UIMOD and Contractor project management plans with the EDD M&O Plan at the conclusion of the Production Support.	

Requirement Number	Description	Bidder Agrees (Y/N)
29	The contractor shall coordinate with the UIMOD Project Office to establish a M&O Plan that incorporates methodologies and practices which will assist EDD in successfully managing the UIMOD system's M&O life cycle and shall, at a minimum, address the following areas: a) Support Model. b) Triage Procedures. c) Tools. d) Identification of Roles and Responsibilities of support personnel. e) Release Management. f) Upgrades. g) Maintenance. h) On-going Operations. i) Customer Support. j) Specific support procedures for production. k) Deliverables. l) Resource Requirements (staff loading). m) Business Services Migration. n) Capacity Management. o) Technology Refresh. p) System security. q) Backup and Recovery. r) Disaster Recovery. s) Deficiency/Issue management.	
30	The UIMOD VoIP and Service Oriented Architecture (SOA) technical areas represent new technologies to EDD. Therefore, the Contractor shall provide a distinct support model for both VoIP and Service Oriented Architecture (SOA) Support. In the support model for these new technologies, the following concerns must be addressed: a) The staffing and skills needed to support the various aspects of the SOA and VoIP solution. b) The organizational changes or structure needed. c) The roles and responsibilities owned by various organizational components. d) Processes needed to support these solutions. e) Network changes or augmentations needed. f) Support training needs for staff.	

6B.2   Technical Management Systems

6B.2.1 HW/SW Inventory Management System / Parts Tracking

Requirement Number	Description	Bidder Agrees (Y/N)
31	The Contractor shall submit for approval a Hardware/Software Production Equipment List for all purchases recommended by the Contractor for the project.	
32	The Contractor shall maintain a Hardware/Software Tracking System to identify the disposition and inventory accounting for equipment purchased by the Contractor on behalf of the project.	
33	The Contractor shall define the processes and tools to manage, track, and inventory purchases on behalf of the State for the UIMOD Project and document the approach in the Project Management Plan (PMP) for such tracking information as: a) Serial #, b) Location, c) Warranty information.	
34	The Contractor shall define how the Contractor will manage, track, and deliver hardware and software purchases on behalf of the State for the UIMOD Project, and document the approach in the PMP.	

6B.2.2   Requisite Pro (ReqPro) Requirements Management Database

The UIMOD Project is using ReqPro to store and manage system requirements. Project Management requirements and other implementation-related requirements will not be managed using ReqPro. The UIMOD Project Office will update and manage all functional and technical requirements using the ReqPro requirements repository.

Requirement Number	Description	Bidder Agrees (Y/N)
35	The Contractor shall deliver system components (in Microsoft (MS) Excel format) to the UIMOD Project Office that satisfies the following: a) Allows for easy updating to the ReqPro database (by UIMOD Project Office staff). b) Substantiates traceability between defined system components and UIMOD system requirements.	
36	The Contractor shall update the traceability component of the ReqPro database in coordination with the UIMOD Project Office and the processes defined by the UIMOD Requirements Management Plan. The traceability updates shall be done in coordination with the pre-production release cycles in order to keep the requirements traceability current on a recurring basis.	

6B.2.3 Defect and Issue Tracking System

Defect Levels will be categorized as follows:

Table 6B.1 – Defect Levels

Defect Level	Definition
Critical	Problem results in a complete system outage and/or is detrimental to the majority of the development and/or testing efforts. There is no workaround.
Serious	System functionality is degraded with severe adverse impact to the user and there is not an effective workaround.
Moderate	System functionality is degraded with a moderate adverse impact to the user but there is an effective workaround.
Minor	There is no immediate adverse impact to the user.

Requirement Number	Description	Bidder Agrees (Y/N)
37	The Contractor shall install and test a single Defect and Issue Tracking System that the Contractor and the UIMOD Project Office shall use collaboratively for the tracking of system defects, security, and system issues.	
38	The Contractor shall allow the UIMOD Project Office full access to the Defect and Issue Tracking system used by the Contractor.	
39	The Defect and Issue Tracking System shall be designed in a manner to allow for the transfer of ownership to the State following the completion of the contract.	
40	The Contractor shall establish a repository where all defects and their corresponding solutions are recorded and tracked according to subproject.	
41	The processes and management of the Defect and Issue Tracking system shall be addressed as part of the Contractor Quality Management Plan.	
42	The Contractor shall comply with the approach to classifying deficiencies as described in Table 1–Defect Levels, including the requirement that the UIMOD Project Office shall designate the level of severity to all deficiencies. a) Critical and serious deficiencies (incidents) shall require remediation and retesting before the system enters production. b) Moderate and Minor deficiencies shall be fixed to the UIMOD Project Office's satisfaction prior to system acceptance.	

Requirement Number	Description	Bidder Agrees (Y/N)
43	The Contractor shall provide a classification and tracking method for system or application errors during testing activities that describes the severity of the deficiency, and determination based upon severity, of whether that error shall be corrected prior to the system entering production or prior to system acceptance.	

6B.2.4   Software Source Code Management System

Requirement Number	Description	Bidder Agrees (Y/N)
44	The Contractor shall provide a software source code management system to store, control and track instances (baselines during the construction lifecycle) to all software configuration items that shall be developed for the State.	
45	The server(s) that house the Contractor's source code management systems shall reside at the State at a location specified by the UIMOD Project Office, and the software configuration management system shall be accessible by UIMOD Project Office personnel.	
46	The Contractor's choice of a software configuration management system must be approved by the UIMOD Project Office. The EDD is currently determining an enterprise standard for software source code control.	
47	All software versions managed by the Contractor must conform to software versioning conventions defined in the EDD Technical Bulletins 29 and 30. (See "EDD TB 29" and "EDD TB 30" in the Bidders' Library, Reference DTS/EDD folder, EDD Custom Application .NET Assembly Versioning Convention (Technical Bulletin 29) and EDD Production Release Versioning Conventions (Technical Bulletin 30).).	
48	The Contractor shall use the EDD source code control tool, ChangeMan, for all mainframe software development projects.	

6B.2.5   Build Management System

Requirement Number	Description	Bidder Agrees (Y/N)
49	The Contractor shall procure and develop an independent build management server for managing software source code versions, separately from the development and test environments.	
50	The Contractor shall establish and document in the SEMP a build management process for all hardware and software deliveries.	
51	The Contractor shall ensure that physical data models are kept up to date, at least monthly, throughout the implementation of the UIMOD systems.	
52	Any builds delivered to UIMOD shall be assembled from source stored at EDD, and using tools installed on a build server at EDD.	

6B.3   General Environment Requirements

6B.3.1   Special Environment Constraints

Requirement Number	Description	Bidder Agrees (Y/N)
53	All windows servers shall utilize terminal services or a similar tool that uses an encrypted data stream between the host and the client.	
54	The EDD computer room cannot accommodate 45U racks. The combination of the test and development environment shall be capable of residing in one or more 42U racks. The choice of racks and rack specifications shall be approved by the UIMOD Project Office.	
55	The database server for the pre-production and production system shall run on a computing platform where the operating system software, database, and hardware are all certified and demonstrated to operate in the 64 bit platform.	

6B.3.2   Tools

Requirement Number	Description	Bidder Agrees (Y/N)
56	The Contractor shall procure and install all required automated testing tools for all non-production environments.	
57	The Contractor shall install and test the UIMOD development tools in the respective development environment.	
58	The Contractor shall procure and configure all required data conversion tools, software and hardware.	
59	The Contractor shall develop, procure and provide automated data cleanup tools for the CCR training environment.	
60	The Contractor shall procure and configure an automated tool that allows state and contractor staff to copy UI claim and related data from the production environment to the development and testing environments. The facility shall have the capability to copy either individual claims or a range of claims.	
61	Remote administration tool (e.g., Terminal Services) licenses for the test, development and production servers shall be provided by the Contractor.	

6B.3.3   Data Network Upgrades

Requirement Number	Description	Bidder Agrees (Y/N)
62	The Contractor shall deliver Data Network Upgrades to support the call centers and the UCD at the UIMOD Project Office's approval of the Contractor's recommendation.	

Requirement Number	Description	Bidder Agrees (Y/N)
63	The Contractor shall procure all necessary network equipment for each of the 15 UI call centers.	
64	The Contractor staff shall only be allowed to access the UIMOD network while on-site. No remote access hardwired/wireless to the State network shall be allowed without special arrangements being made with the UIMOD Project Office; approval will be held by the Information Security Office.	
65	Information placed on removable media must conform to the policies laid out in Department of Finance (DOF) Budget Letter BL05-32 (11/05) and State Administrative Manual chapter 4841.2 Information Integrity and Security.	
66	The Contractor must notify the State data owners and the ISO within two (2) hours of a suspected or real security incident involving any information asset, including, but not limited to: a) Responding to availability outages, b) Equipment failures, system or data integrity. c) Losses, misuse, or improper access to or dissemination, of information.	

6B.3.4   Voice Over Internet Protocol (VoIP)

Requirement Number	Description	Bidder Agrees (Y/N)
67	The Contractor shall install local VoIP equipment at each call center.	
68	The Contractor shall procure all necessary VoIP phone equipment for the call centers.	

6B.3.5   Virtual Private Network (VPN) Access Plan

Requirement Number	Description	Bidder Agrees (Y/N)
69	In the Contractor solution, and in the event the Contractor proposes to host the UCD, the Contractor shall also submit a plan, to be approved by UIMOD Project Office, for access to the UCD through the Department of Technology Services (DTS)/EDD network.	
70	In the event the Contractor proposes to host the UCD, the proposed solution must conform to EDD/DTS Security requirements, and must be approved by the UIMOD Project Office.	

6B.3.6 Operational Reporting Environment Software

Requirement Number	Description	Bidder Agrees (Y/N)
71	The Contractor shall purchase and install any necessary components (commercial off-the-shelf (COTS) or custom-developed software and hardware) for the operational reporting environment that is specific to the CCNPAU project and cannot be shared with CCR.	

6B.4 Technical Environments

This section outlines requirements for procuring and installing the non-production and production hardware and software environments for the UIMOD systems.

The Contractor will be responsible for the new system infrastructure required to develop, test, and deploy the call center infrastructure as well as the new continued claims systems. The requirements for these environments are defined below.

The EDD and DTS will provide managed access to the existing mainframe development, test, and pre-production systems. The Contractor will work with the EDD and DTS to configure the interfaces between the new environments and the mainframe environments.

6B.4.1 General Technical Environment Constraints

Requirement Number	Description	Bidder Agrees (Y/N)
72	All procured environments to be housed at DTS shall adhere to the guidelines, and contain the infrastructure management and security tools, as identified by DTS. (see See Bidders' Library, Security Standards folder, DTS Information Technology Security Manual.)"DTS Security Manual" in the Bidders library).	
73	All procured environments to be housed at EDD shall adhere to the guidelines, and contain the infrastructure management and security tools, as identified by EDD. (see See Bidders' Library, Security Standards and EDD Enterprise Architecture Reference Model/Supporting Documents folders."DTS Security Manual" in the Bidders library)	
74	All procured server configurations must conform to the EDD/DTS server specifications in place at the time of contract award. (See "2004-2005 Server Equipment Specification in the Bidders' Library, Reference DTS/EDD folder, EDD 2004 – 2005 Server Equipment Specification for a current sample.)	
75	All Contractor-supplied hardware and software must conform to the guidelines specified in the EDD IT Asset Management Policy (See "EDD IT Asset Management Policy" in the Bidders library, as well as the "EDD Asset Management Template")be approved by the UIMOD Project Office.	

6B.4.2   Software Licenses

Requirement Number	Description	Bidder Agrees (Y/N)
76	The Contractor shall hold, until System Acceptance of each of the two (2) subprojects, all software licenses required to support all Contractor-developed computing environments used in support of the UIMOD Systems. This includes commercial off-the-shelf (COTS) software owned by the Contractor, as well as any Third-Party Software purchased by the System Integrator (Prime Contractor).	
77	During the implementation phases, the State shall be a sub-licensee or grantee of all rights necessary to allow it to conduct the State's proposed activities during the phased implementation period. All use rights and privileges typically granted to the licensee shall be granted to the State during the implementation period. At system acceptance of each subproject, all licenses shall automatically pass to the State provided that the State Department of General Services (DGS) has approved licenses. (See Requirement 78 below.)	
78	All Third-Party Software Providers must also agree to the State's General Provisions — Information Technology. Software licensing terms and conditions provided by Bidder which are not in conflict with the State's General Provisions — Information Technology (GSPD-401IT) (See Section 11, Std. 213, Attachment 2)) will be accepted by the State, provided however, any licensing clause, term or condition representing that the license is superior to or takes precedence over other articles, attachments, specification, provisions, contracts, terms or conditions shall be stricken and shall have no legal effect.	
79	Upon Final System Acceptance, acceptance of both subprojects, the State shall become the licensee of all Contractor purchased software and own all warranty contracts that are purchased as part of the solution by the Contractor.	
80	The Contractor shall store and manage COTS software and licenses as configuration items according to the Contractor's configuration management plan.	
81	Source code Ownership – All software developed under this contract, other than COTS, shall be the property of the State of California including all modifications to COTS.	
82	Escrow of Source Code – The selected Contractor shall furnish or escrow the readable source code and object (executable) code for all functionality licensed for use by State of California. This may be done with a national escrow company or with the State itself. The Contractor shall agree to maintain release upgrades in like manner. In the case of Contractor dissolution or cessation of support by the Contractor, all code held in escrow shall become the property of the State of California.	

6B.4.3   Product Warranty

Requirement Number	Description	Bidder Agrees (Y/N)
83	The Contractor shall provide a "productive use" warranty for a minimum of one year after system acceptance by the State. This warranty shall ensure that the application functions in a stable and dependable manner according to system design specifications.	
84	The Contractor shall warrant that all equipment purchased shall be in good operating condition and shall conform to the product standard of performance throughout the warranty period.	
85	The Warranty Period shall be the amount of time published by the manufacturer, or as agreed to in a statement of work, field order or other authorizing document.	
86	The Warranty Period shall commence upon the first day after the acceptance date of the whole system.	
87	The Contractor shall adjust, repair, or replace all equipment that is defective or not performing in conformance with the standard of performance during the Warranty Period.	
88	The Contractor shall pay all costs for such adjustments, repairs, or replacements, including all costs for replacing parts or units, installation, and any transportation and delivery fees.	
89	Any defective equipment shall be repaired or replaced with new equipment for the State so that it conforms to the original standard of performance.	
90	For all equipment purchased from Contractor, the Contractor agrees that all warranty services provided under the contract shall conform to the terms and conditions for maintenance of similar equipment.	
91	The Contractor shall provide a warranty equal to the original warranty period for all equipment that is replaced by the Contractor.	
92	Equipment that is provided as replacement equipment shall be subject to a new Warranty Period, commencing at the time of replacement.	
93	Warranties included with all equipment purchased from a third party shall be administered by the Contractor on behalf of the State pursuant to the warranty agreement. The Contractor shall serve as the point of contact for all warranty related services that may be performed by the warrantor.	
94	The Contractor shall warrant that all UCD system equipment purchased pursuant to the engagement will be new and shall be in good operating condition and shall conform to the Standard of Performance throughout the Warranty Period. The Contractor shall provide warranty services as provided for herein.	

Requirement Number	Description	Bidder Agrees (Y/N)
95	During any Warranty Period, the Contractor shall adjust, repair, or replace all Equipment that is defective or not performing in conformance with the Standard of Performance. All costs for such adjustments, repairs, or replacements, including all costs for replacing parts or units, installation, and any transportation and delivery fees, shall be at the Contractor's expense. Any defective Equipment shall be repaired or replaced with new Equipment for the UIMOD Project Office so that it conforms to the Standard of Performance. Equipment that is provided as replacement equipment will be subject to a new Warranty Period, commencing at the time of replacement.	

6B.4.4   LAN/WAN Constraints

Requirement Number	Description	Bidder Agrees (Y/N)
96	All new Web servers that access the existing DTS/EDD LAN/WAN shall be compatible with the LAN/WAN and meet EDD Standards.	
97	New gateway servers that access the existing DTS/EDD LAN/WAN shall be compatible with that LAN/WAN.	
98	All new workstations that access the existing DTS/EDD LAN/WAN shall be compatible with that LAN/WAN and meet EDD Standards.	
99	Where new telephones are to be connected to the existing DTS/EDD LAN/WAN they shall be compatible with that LAN/WAN.	
100	Additions to the data network WAN shall comply with the current standards and infrastructure of the DTS/EDD WAN.	
101	Additions to the data network LAN shall comply with the current standards and infrastructure of the EDD LAN for each call center and meet EDD Standards. (~~see~~ See Bidders' Library, Reference DTS/EDD folder, EDD Network Infrastructure Standards.)	
102	Additions to the data network WAN shall comply with the current naming conventions. UIMOD Project Office shall provide the naming conventions.	
103	Equipment added to the data network LAN/WAN shall comply with the current addressing standards of the DTS/EDD WAN. UIMOD Project Office shall provide the IP addresses.	
104	All new equipment added to the DTS/EDD LAN/WAN shall conform to DTS/EDD Security Standards. (~~s~~See Bidders' Library, Security Standards folder, EDD Information Security Policy and DTS Information Technology Security Manual.)	

6B.4.5   Development Environment

Requirement Number	Description	Bidder Agrees (Y/N)
105	The Contractor shall build and certify for use the Development environment for the UIMOD project.	
106	The Contractor shall procure all hardware and software needed in support of the development environment.	
107	The Contractor shall work in cooperation with the UIMOD Project Office to install and configure the UIMOD development environment.	
108	The contractor shall provide to UIMOD a Development Environment Configuration Manual, Operations Manual and Service Manual.	
109	The Contractor shall allow the UIMOD Project Office personnel complete access to the development environment to verify and validate all aspects of the contents and quality of the builds.	

6B.4.6   Testing Environment

Requirement Number	Description	Bidder Agrees (Y/N)
110	The Contractor shall procure all hardware and software for the CCNPAU test environment.	
111	The Contractor shall procure hardware and software for the CCR test environment.	
112	The Contractor shall work with the UIMOD Project Office to install and configure the UIMOD test environment.	
113	The Contractor shall create and submit to the UIMOD Project Office for approval a physical test system configuration.	
114	The contractor shall provide to UIMOD a Testing Environment Configuration Manual, Operations Manual and Service Manual.	
115	The CCR testing infrastructure shall accommodate the testing need to synchronize the system date throughout each component. The system date may actually reside in multiple systems in a distributed environment and may be difficult or impossible to change if other applications also reside on any of those servers.	
116	The CCR testing system shall be a mirror of the production system, with the exception that the test environment need only have a minimum of two (2) servers for each layer. For example, the production Web server farm may have 20 servers, fronted by a load balancer/switch, but the test server farm shall only need to have two (2) servers fronted by a load balancer/switch.	
117	The Contractor shall maintain the automated test tool and automated scripts under configuration management control for the lifetime of the Contract. The Contractor shall provide access including but not limited to the State staff as designated by the State Project Manager for testing.	

Requirement Number	Description	Bidder Agrees (Y/N)
118	The testing environment shall include the ability to isolate unit tests and have adequate infrastructure to support integration testing, stress/load/performance testing and system/end to end or customer acceptance testing.	
119	The Contractor shall ensure that data can be synchronized in the test environment with the data in the test mainframe system. The Contractor shall work with the UIMOD Project Office to ensure that data in the pre-production environment is also synchronized with data in the test mainframe system.	

6B.4.7   Pre-Production Environment

Requirement Number	Description	Bidder Agrees (Y/N)
120	The Contractor shall procure hardware and software for the CCR pre-production environment.	
121	The Contractor shall work with the UIMOD Project Office to install and configure the CCR pre-production environment.	
122	The Contractor shall not establish a pre-production facility for the CCNPAU in an effort to minimize the project infrastructure cost.	
123	The Contractor shall provide a CCR pre-production environment that has the capacity of holding and processing at a minimum ten (10) percent of the active claim load.	
124	The contractor shall provide to UIMOD a Pre-Production Environment Configuration Manual, Operations Manual and Service Manual.	
125	The CCR pre-production system shall be a mirror of the production system, with the exception that the pre-production system need only have a minimum of two (2) servers for each layer. For example, the production Web server farm may have 20 servers, fronted by a load balancer/switch, but the pre-production server farm shall only need to have two servers fronted by a load balancer/switch.	

In the tables that follow, the Unified Call Distribution System (UCD) is defined as a single system that shall provide Interactive Voice Response (IVR) and Intelligent Call Management (ICM), with Skills-Based Routing, for the Call Centers. There are no requirements regarding specific locations for IVR equipment. Provided that the functionality requirements are met, the equipment locations are not geographic specific.

The physical structure of the UCD system will be constructed in 17 or more locations.

1. The Computer Room is located at the EDD headquarters office in

Sacramento. This is an environmentally controlled server room with rack-mounted servers, and Uninterruptible Power Supply (UPS)

2. Computer Rooms are located at each of the Call Centers, Adjudication Centers and IAD. These are also environmentally conditioned server rooms.

3. Redundant equipment for centralized switching shall be located in a geographical location approved by the UIMOD Project Office to ensure environmental stability (e.g., not in same flood plain or earthquake zone as primary equipment).

6B.4.8 CCNPAU Production Environment

Requirement Number	Description	Bidder Agrees (Y/N)
126	The Contractor shall procure all hardware and software for the CCNPAU production call center environment.	
127	The Contractor shall work with the UIMOD Project Office to install and configure the CCNPAU production environment.	
128	The contractor shall provide to UIMOD a CCNPAU Production Environment Configuration Manual, Operations Manual and Service Manual.	
129	The state shall prepare the environmentally conditioned rooms for the UCD equipment based upon written requirements provided by Contractor and agreed to by the parties. Contractor's specialists shall be available to provide required consultation related to environment preparation at no extra cost to the state apart from the costs presented in the Field Order, Statement of Work or other authorizing document. Contractor shall reimburse the state for all costs incurred by the state to meet any requirements for the environment not disclosed in Contractor's cost proposal, Statement of Work, Field Order or other authorizing document.	
130	In the event the UCD is hosted by the state, the Contractor shall provide written requirements for environmentally conditioned rooms necessary to support UCD equipment necessary to the UCD project.	
131	The Contractor shall purchase and install any necessary commercial off-the-shelf (COTS) software and hardware components for the production UCD.	
132	In the event that the Contractor proposes to host the UCD at EDD, the Contractor shall create a facilities needs assessment for the development and production UCD.	
133	Contractor shall provide a plan for construction of the system that includes proposed geographical locations for equipment.	
134	Skills Based Routing equipment shall be located in EDD's Sacramento Central Office and in one remote location that meets UIMOD's requirements, including sufficient isolation from the Sacramento Central Office to assure adequate stability.	

Requirement Number	Description	Bidder Agrees (Y/N)
135	The Contractor shall provide UPS equipment to support all UCD equipment installed at EDD locations. For equipment installed at the EDD Sacramento Central Office location the UPS shall provide 170 minutes of battery back-up capacity. For equipment installed at the Call Centers, the UPS shall provide 20 minutes of battery back-up for controlled shut-down of equipment. All equipment shall comply with EDD standards for servers and UPSs.	

6B.4.9   CCR System Production Environment

The CCR System will be housed in two locations:

1. The development, test, and training systems will be hosted in computer rooms located at the EDD headquarters office in Sacramento. The EDD will provide computer rooms that are environmentally controlled with rack-mounted servers and UPS.

2. The Business Intelligence, pre-production, and production computing environments shall be hosted by DTS or EDD. The hosting provider will provide environmentally controlled server rooms with rack-mounted servers, and UPS.

Requirement Number	Description	Bidder Agrees (Y/N)
136	The Contractor shall procure all hardware and software for the UIMOD CCR System production environment.	
137	The Contractor shall work with the UIMOD Project Office to install and configure the UIMOD production environment.	
138	The Contractor shall provide to UIMOD a CCR System Production Environment Configuration Manual, Operations Manual and Service Manual.	
139	The CCR System shall operate on the network infrastructure supplied by DTS.	
140	The Contractor shall purchase 15 seat licenses of Extream Dialogue v5 or higher, a postscript printing product.	

6B.4.10 Business Intelligence Environment

Requirement Number	Description	Bidder Agrees (Y/N)
141	The Contractor shall procure and install all software and hardware components for the Business Intelligence environment.	
142	The Contractor shall work with the UIMOD Project Office to install and configure the UIMOD Business Intelligence Environment.	

Requirement Number	Description	Bidder Agrees (Y/N)
143	The Contractor shall provide to UIMOD a Business Intelligence Environment Configuration Manual, Operations Manual and Service Manual.	
144	All UIMOD production data sources shall have the capability of being included in the Business Intelligence environment, and available for end-user reporting.	

6B.5   UIMOD Application Prototype

The UIMOD Application Prototype, hereafter referred to as the Prototype, exists to establish an early glimpse of solution approach and design and will be the basis for proceeding with the system development life cycle. The requirements below establish the minimum set of requirements that will be required by the Contractor for the prototype.

6B.5.1   Prototype Design

The Prototype Design will be used to validate the first phase of system design and to communicate and clarify the functionality of the Prototype.

Requirement Number	Description	Bidder Agrees (Y/N)
145	The Contractor shall develop a Prototype design based on the prototype approach presented as part of the proposal. The design shall include an overall description of the prototype design, addressing each of the prototype areas, and must include the following: a) A detailed description of Web and Enterprise services, including WSDL meta-objects for Web Services, if available. b) A detailed description of Business Entities (Data Objects), including an XML Schema Definition (XSD) meta-objects for Business Entities (Data Objects). c) Screen Mockups	

6B.5.2   Prototype Requirements

After contract award, the Contractor must design and develop a UIMOD Application prototype. Demonstrate an understanding of the required application architecture, design patterns, technical requirements and technical capability. The Prototype will be used as a foundation for the development of the UIMOD system.

6B.5.2.1   Prototype Functional Requirements

Requirement Number	Description	Bidder Agrees (Y/N)
146	The Prototype must provide user access through two channels -- Web Server (via Web browser), and IVR (via phone).	
147	The Web Browser channel must allow the claimant to sign in from the Internet, view claimant's profile and update address and other attributes in the claimant's profile.	
148	The Web Browser channel must allow the claimant to sign in from the Internet and enter data for a continued claim.	
149	The Prototype must validate the continued claim and save it in the database or reject it. (In this case, validate only means that all required data has been captured, and conforms to field level validation rules.)	
150	The phone-IVR channel must allow a claimant to sign in from a phone and enter data for a continued claim.	
151	The Continued Claim data object must have all attributes used on the current Continued Claim (DE4581) form. (See the DE4581 form in the Bidders' Library, Forms folder, EDD Continued Claim Form – DE4581.)	
152	The Claimant can be pre-registered as a user of the Prototype.	

6B.5.2.2   Prototype Technology, Patterns, Components and Tools Requirements

Requirement Number	Description	Bidder Agrees (Y/N)
153	The Prototype server operating system must be MS Windows 2003 server or higher.	
154	The Prototype platform must be MS .NET 2.0 or a higher version. Note: Bidders can use any additional frameworks, SDK, tools, components and controls as needed to deliver requested Prototype system functions, capabilities and features.	
155	The Prototype Developers Studio must be MS VS.NET 2005 or higher version.	
156	The Prototype must be developed using the C# language.	
157	The Prototype Web Server must be MS IIS 6.0 or a higher version.	
158	The Prototype Database must be MS SQL Server 2005 – 64 bit Enterprise Edition.	
159	The Prototype Identity Registry for authentication must be MS Active Directory or MS SQL Server database.	
160	The Prototype IVR application must consume the same Web Services as consumed by Prototype Web Application.	

Requirement Number	Description	Bidder Agrees (Y/N)
161	The Prototype IVR pages format must be VoiceXML 2.0 or a higher version.	
162	The Prototype must have two (2) main Business Data Object types: claimant and continued claim.	
163	The Prototype must use a Web Wizard based on a Session/Objects/Forms Event/State management solution using XML meta-data for state and events management. The prototype Web Application Session state must utilize ASP.NET out-of-process state service.	
164	The Prototype must allow a user to enter data on a form and click buttons to navigate between Web forms (e.g. [Next], [Back], [Finish]). Web Forms events must invoke an Event/State management component to change session state and invoke next Web Form component based on the current session state and input event, as defined in the XML meta-data for the Prototype.	
165	The Prototype must have Web page(s), which use(s) MS ASP.NET 2.0 Out-of-Bound Callback (Ajax or a comparable product) technology for displaying data via DDL or other controls, which display record sets of Data Objects extracted from data sources.	
166	The Prototype must allow user to change his/her address in the Claimant Profile using selection of an item in Country DDL or Combo-box, which updates associated States DDL/Combo-Box from the database using MS AJAX JavaScript (or a comparable product). (Show that Web page is not refreshed).	
167	The Prototype must use an encryption solution for confidential properties of data objects and allow a designer/administrator to change the configuration/metadata to turn on/off for selected confidential properties of the selected data object types (e. g. SSN field) in the application memory (including in ASP.NET Session object) and in the database.	
168	The Prototype solution must implement key management for data object encryption in a distributed environment with Web browser users and smart client users. (The solution must not use the same encryption key for all persistent data objects with confidential properties.)	
169	The Prototype will allow the user to enter his/her SSN on a Web Form and the application will invoke component to encrypt confidential SSN field in the application session state and save in the database as encrypted data while saving non-confidential fields in the database as clear text data.	
170	The Prototype must use ASPX/ASCX Asynchronous ASP.NET Processing utilizing PageAsyncTask object or similar objects and invoke Web Services asynchronously, invoke .NET Enterprise Services (COM+) asynchronously to access data sources. The used Enterprise Services must be stateless and use object pooling.	

Requirement Number	Description	Bidder Agrees (Y/N)
171	The Web Services used must be stateless and must not use session cookies and must be built using Windows Communication Foundation (WCF), WSDL, and XSD. The Web Services must use Document/literal style SOAP messages and WS-Security	
172	The Prototype must use an XML based Domain Object Model solution: a) The UIMOD prototype application's meta-data, configurations, settings must have XML format. b) All Data Objects must be automatically (de)serialized to/from XML by .NET when passed to Web Service as arguments, and when passed automatically to other processes. c) All Business Data Objects must have Object Schemas/Profiles defined (meta-data to define Data Objects constraints / events / properties). d) All Web Services must have WSDL and all complex type SOAP arguments must have XSD. e) The UIMOD prototype must use few generic Business Entity class(es) to manipulate many Data Objects types described by XML Schemas. Data Objects must be de-coupled from Data Sources.	
173	The Prototype must use an optimistic concurrency disconnected programming model. It must implement optimistic concurrency exception handling without loss of client data.	
174	The Prototype must use a disconnected container of business data objects, which can be Service Data Object (SDO) container, XML Data Objects (XDO) container or any similar Data Objects container.	
175	The Prototype must allow two (2) users to concurrently display/update the same Claimant Profile data object from two PCs and get optimistic concurrency exception and handle this concurrency exception without loss of data by the users.	
176	The Prototype must use a Data Access Layer solution with Data Objects and relational mapping functions that utilize XML mapping schemas to map (Save and Get) XML Data Objects to/from relational database.	
177	The Prototype must use XML Data Object and Relational mapping solution to save XML data objects in the RDBMS, where many elements/attributes of XML data object are saved in separate fields (columns/rows) of separate database tables.	
178	The Prototype must use a role-based access control security solution for a Data Access layer to control access to data objects in the database.	
179	The Prototype must use a Web forms and Data Objects mapping solution that utilizes XML mapping schemas and XSL transforms to bind/map ASP.NET Web Forms to Data Objects. (This solution can be conceptually similar to MS Office InfoPath).	

Requirement Number	Description	Bidder Agrees (Y/N)
180	The Prototype must allow users to display and update Claim and Claimant Profile XML data objects on forms and click a button to submit data object updates made on the Web Form. The ASP.NET Web Form mapping solution has to update XML Data Object using data posted back from the Web form and has to bind XML data object with Web Form.	

6B.5.2.3   Prototype Minimum System Configuration Requirements

Requirement Number	Description	Bidder Agrees (Y/N)
181	The Prototype will utilize one real or virtual Database server.	
182	The Prototype will utilize one real or virtual Application server.	
183	The Prototype will utilize one real or virtual Web server.	
184	The Prototype will utilize one real or virtual IVR server.	

6B.5.2.4   Prototype Deliverables and Test Cases Requirements

Requirement Number	Description	Bidder Agrees (Y/N)
185	The Contractor must provide to the UIMOD project office instructions for how to access the two channels (Web Browser and IVR).	
186	The Contractor must provide to the UIMOD project office a description of the Prototype solution with a detailed explanation of how the Contractor has implemented each Prototype technology requirement and each Prototype functional requirement specified in this document.	
187	The description must include references to specific source code files (C#, aspx, ascx, aspx.cs, ascx.cs, SQL, etc), code sections and lines of code and an explanation how it is used.	
188	The description must include specific sections and fields in the XML configuration files and XML meta-data, which are used in each technology requirement implementation and an explanation how it is used.	
189	The description must include references to specific sections and screen fields in MS Windows and .NET GUI administration tools, which are used in each technology requirement implementation and an explanation how it is used. (i.e. Global Assembly Cache (GAC) list, Component services, IIS web site and virtual folders and their properties, SQL Server Enterprise Manager, etc).	
190	The Contractor must provide to the UIMOD project office all software source code, configuration files and XML meta-data.	

Requirement Number	Description	Bidder Agrees (Y/N)
191	The Contractor must provide to the UIMOD project office a data base file (both data and schema).	
192	The Claimant Profile update function must demonstrate use of MS AJAX (or a comparable product) for selection of an item in Country DDL or Combo-box, which updates associated States DDL/Combo-Box from Database using MS AJAX (or a comparable product) (show that Web page is not refreshed).	
193	The Contractor must demonstrate that the Claimant profile and Continued Claim data objects have an encrypted SSN attribute. After data is entered and saved in the database, view the database (using tools like MS Enterprise Manager) to show captured data in tables and each encrypted field in rows/columns and salt for each encrypted field.	
194	The Contractor must demonstrate the use of Asynchronous Processing by creating two versions of the same sample UIMOD ASP.NET Web prototype application and use a load test tool simulating multiple concurrent users to measure throughput and response time. Both versions of the Prototype must have the same business logic code and same Web pages. Both versions of same sample ASP.NET Web application must invoke the same Web Service asynchronously and the same Enterprise Service asynchronously to perform the same SQL requests and displays result on ASP.NET Web page. The load test must demonstrate the following: a) The load test must simulate the number of concurrent users, which is greater than the number of threads of ASP.NET/IIS thread pool. b) Version 1 of this Prototype Web application has to use ASPX/ASCX with Asynchronous ASP.NET Processing. c) Version 2 of this prototype Web application has to use ASPX/ASCX without Asynchronous ASP.NET Processing. d) Provide traces and test results from load tests of each sample application version. e) Explain the difference in throughput and response time.	

Requirement Number	Description	Bidder Agrees (Y/N)
195	The Contractor must demonstrate the implementation of optimistic concurrency in ASP.NET Web prototype application (on claimant profile update form), where two (2) users concurrently display/update the claimant profile data object from two PCs and get optimistic concurrency exception. The demonstration sequence must be as follows: a) User1 uses prototype Web application on PC1 to read data object <1> and displays it on a Web Form b) User2 uses same prototype Web application on PC2 to read same data object <1> and displays it on a same Web Form c) User1 updates data object <1> via Web form and saves updates of the data object it in RDBMS d) User2 updates same data object <1> via Web form, clicks a button to save updated data object in RDBMS, but gets a Concurrency exception and proper error message, which explains that this data object was concurrently updated by another user. The Contractor must demonstrate that User2, which gets a concurrency exception, does not lose entered data due to concurrency exception. The demonstrated solution has to read from RDBMS data object <1> updated by user1, merge it with data entered by user2 and display on a Web Form data object1 with changes made by user1 and user2 and allow user2 to update data object1 in RDBMS with merged changes or make more changes and update.	

6B.6   Design Phase 1- Core System Analysis

The Design Phase has been broken down into two separate phases that include both the specification of a logical solution (a System Architecture) and a physical solution (a Detailed Design). The purpose of Phase 1 is to allow the Contractor the opportunity to lead a detailed Use Case analysis to elaborate on and verify the system requirements and architecture that have been established by the UIMOD Project Office. Phase 1 also allows the Contractor to determine the software COTS tools, products, Software Development Kits (SDKs), and technologies, to create detailed application architecture views and diagrams, and to create a conceptual design. A critical aspect of this phase is the ability of the Contractor to establish sufficient understanding of the business processes and technologies being applied as well as to set expectations for the contents and schedule of each iterative build and release.

The UIMOD Project requires the use of an iterative development methodology for software development. This allows both the Contractor and the UIMOD Project Office more frequent feedback as to the progress of the Project, with more opportunities to make corrections in interpretation, and will result in a better understanding of the challenges of the Project at an earlier date (see Figure 6B.1 – Iterative Development, Incremental DeploymentFigure 6B.1 – Iterative Development, Incremental
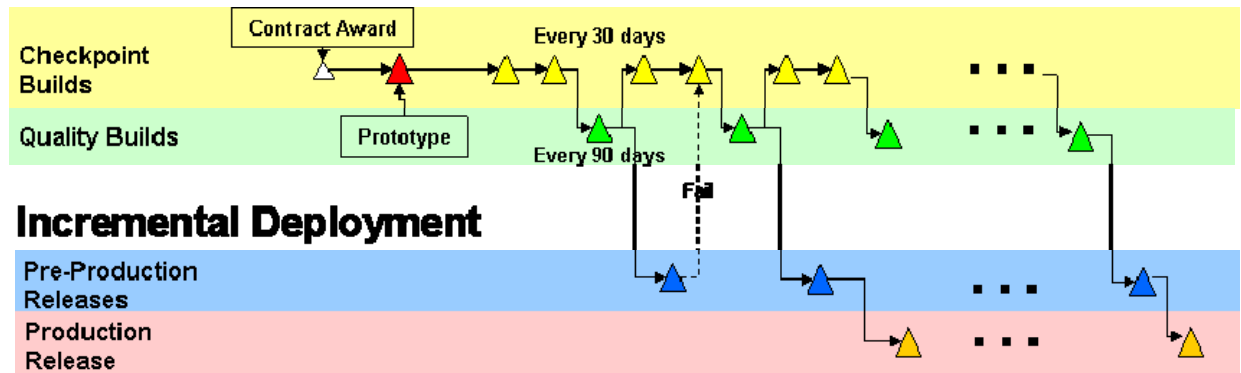
Deployment)

Iterative Development

Figure 6B.1 – Iterative Development, Incremental Deployment

6B.6.1   System Requirements Validation and Modifications

The UIMOD Project has used the use case approach to determine system functional requirements. The Contractor is expected to gather and confirm they have complete system requirements by validating UIMOD-established requirements.

Requirement Number	Description	Bidder Agrees (Y/N)
196	The Contractor shall validate the system requirements defined in this RFP to identify conflicting, erroneous or incomplete requirements and create and submit for approval a description of all proposed requirement modifications to system requirements prior to the first Quality Build.	
197	Any proposed modifications (additions, changes, deletions) to UIMOD requirements shall be managed according to the change control processes defined by the UIMOD Configuration Management Plan.	
198	The Contractor shall conduct detailed requirements gathering to determine end-user report requirements and layout for all required reports.	
199	All approved requirements changes shall be delivered to the UIMOD configuration manager in an Excel (comma separated values) spreadsheet format for import into Requisite Pro, and in accordance with the processes defined by the UIMOD Requirements Management Plan. Requisite Pro is the tool used by the UIMOD project to manage requirements and requirements traceability.	

6B.6.2   Updated System Architecture Description

Requirement Number	Description	Bidder Agrees (Y/N)
200	The Contractor shall develop an update to the System Architecture Description that documents the fully developed System Architecture. The document shall contain: a) Section 1: Application Model 1. Object Role Model (ORM) (see Microsoft standard). 2. Use Cases UML diagram. 3. UML Activity Diagram, showing workflow for the business processes. 4. A list and description of internal and external business services, with dependencies between services. b) Section 2: Conceptual network architecture of the CCNPAU system. This section shall conform to IEEE 1471, and include views that represent the following stakeholder viewpoints: 1. Call Center Manager, with UCD architecture. 2. Network Administrator (Telco, Data), with required network architecture and diagrams, and physical system architecture. 3. IVR Application Developer. 4. Security Administrator. 5. As part of the technical architecture, the contractor shall create Visio and/or Netformx network diagrams and describe the hardware/software specifications that are referenced as part of the architecture.	
201	The Contractor shall design and build the UIMOD system to conform to the existing UIMOD-defined Architecture Description document.	

Requirement Number	Description	Bidder Agrees (Y/N)
202	The Contractor shall propose changes to the existing UIMOD Architecture Diagrams to incorporate Contractor-identified call center best practices, network best practices, and security best practices.	
203	The Contractor shall deliver the System Architecture as a valid configuration item, subject to the UIMOD change management processes defined in the UIMOD Configuration Management Plan.	

6B.6.3   System Architecture Site Assessment

Requirement Number	Description	Bidder Agrees (Y/N)
204	The Contractor shall perform site assessments of where equipment is to be located in order to determine any special considerations that have to be met before equipment can be installed, to include, but not limited to: a) Written requirements for environmentally conditioned rooms for UCD equipment. b) Facilities need assessment for development and production UCD. c) A plan for system construction including proposed geographical locations for equipment.	
205	The Contractor shall perform a comprehensive assessment of the DTS and EDD networks, in the EDD call center network, to include recommendations for Network Upgrades required to meet the requirements for the CCNPAU and CCR project as defined in this RFP. The Contractor will specifically include discussion on the following areas: a) Impact on the current network from VoIP telephony b) Impact on the current network from the adoption of a Service Oriented Architecture, and the resulting increase of service-to-service communication.	
206	The Contractor shall certify that if the recommendations for Network Upgrades are addressed, the solution shall meet the call center performance and scalability requirements defined in this RFP.	
207	The System Architecture assessment findings shall be included as an appendix to the updated System Architecture Description.	

6B.7   Design Phase 2- Detailed Design

In Design Phase 2, the Contractor is expected to use the approved architectural description to develop the detailed design, to propose and discuss physical solution alternatives, and to also begin delivering monthly builds of working software. Reviews are to consist of comparing the detailed design against the elements specified in the System Architecture Description (AD) and the system requirements.

6B.7.1   Detailed Use Cases

Requirement Number	Description	Bidder Agrees (Y/N)
208	The Contractor shall conduct detailed Use Case sessions and produce a complete set of detailed use cases ~~in UML format~~ based on the UIMOD-defined Use Cases.	
209	The Use Cases shall be included as part of the Detailed Design.	

6B.7.2   Detailed Application Design

Requirement Number	Description	Bidder Agrees (Y/N)

210	The Contractor shall develop a Detailed Application Design for each Checkpoint development iteration, producing design artifacts derived from the Architectural Description:
	a) WSDL meta-objects for Web Services.
	b) XML Schema Definition (XSD) meta-objects for Business Entities (Data Objects).
	c) Screen mockups.
	d) Data information derived from the ORM documents:
	   1. Object-to Relational database XML transformation maps.
	   2. Entity-Relation Model (ERM) Diagrams.
	e) Object-to-External Interface transformation maps.	

6B.7.3   Infrastructure Design

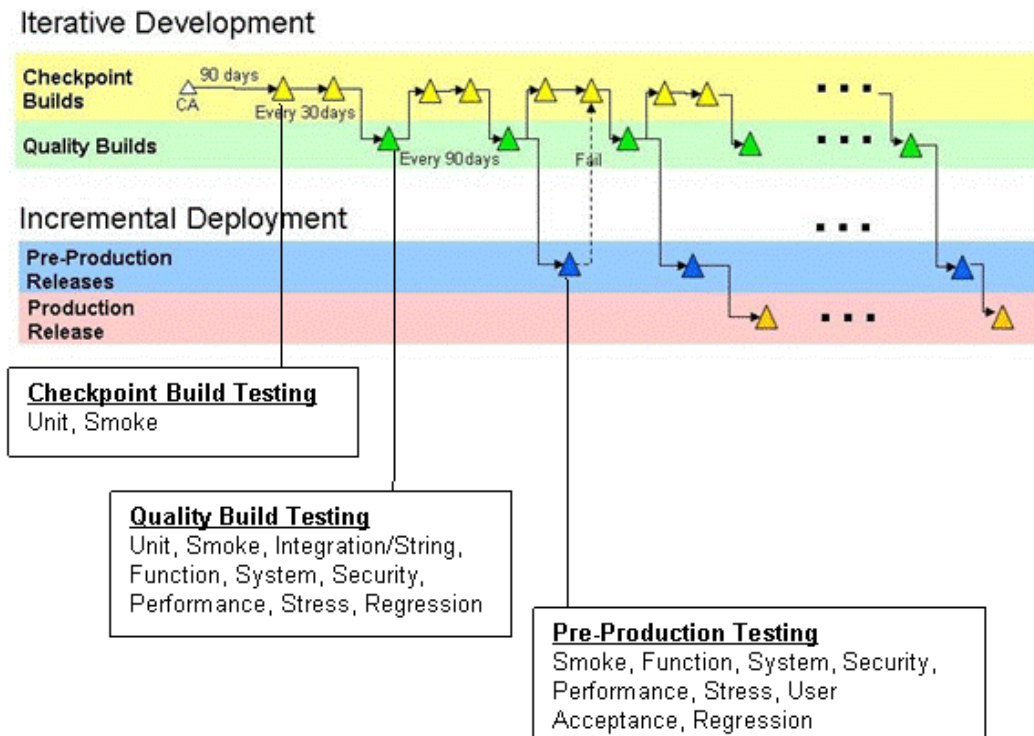| Requirement Number	Description	Bidder Agrees (Y/N)

211	The Contractor shall create an Infrastructure Design for the entire proposed system that addresses, as a minimum, the following areas:
	
	a) The hardware configuration for the hosted server environments, including but not limited to:
	    1. Web Servers.
	    2. Application Servers.
	    3. Database Servers.
	    4. Storage infrastructure (e.g. SAN).
	    5. Load balancers/switches.
	b) Hardware configuration for the network, including:
	    1. An outline of changes required to the current network.
	    2. The switching intelligence of all switching applications shall be detailed.
	    3. Hardware configuration for the call centers, with an outline of the changes required to the call centers.
	c) Physical configuration of the integrated IVR and internet sub-systems, across each environment (development, test, pre-production, and production).
	d) A specific section on infrastructure engineering changes as required to support a Service Oriented Architecture.
	e) A specific section on managing QoS in the EDD/DTS environment.
	f) Hardware/UCD configuration.
	g) UCD software configuration.
	h) IVR configuration and proposed IVR call "tree".
	i) Skills Based Routing functionality configuration.
	j) Detailed system/software design including all system functionality (configuration of the Interactive Voice Response subsystem, and configuration of the Skills-Based Routing subsystem, the reporting subsystem, and all interfaces).
	k) Equipment and software to be purchased and installed.	

6B.7.4 Detailed Design Meetings

Requirement Number	Description	Bidder Agrees (Y/N)
212	The Contractor shall establish and facilitate weekly design meetings to address, as a minimum, the following topics: a) A technical progress report, which lists all new or changed artifacts (models, meta-data, hardware configurations) and new/changed system components. b) Delivered application builds and artifacts and compare them with the AD and the technical report. c) Feedback from UIMOD Project Office with recommended changes to bring development artifacts into alignment with the AD, Software Requirement Specification (SRS), and SEMP. d) Review of the next build of system components and artifacts and discussion of models/design specifications for the next review meeting.	

6B.8 Testing

The Contractor will be building test plans, executing test plans, and creating quality reports. The UIMOD Project Office will evaluate the Contractor-developed test plans, and test results, as well as validate the testing done by augmenting it with State-defined testing. Figure 6B.1 – Iterative Development, Incremental DeploymentFigure 6B.2 – Testing Activities & Development Iteration shows the relationship between the testing activities and the iterative releases.

Figure 6B.2 – Testing Activities & Development Iterations

Iterative Development

Checkpoint Build Testing
Unit, Smoke

Quality Build Testing
Unit, Smoke, Integration/String, Function, System, Security, Performance, Stress, Regression

Pre-Production Testing
Smoke, Function, System, Security, Performance, Stress, User Acceptance, Regression

System integration activities with respect to external systems will be hosted by a new, common interface sub-system that will be used by both the IVR and the web applications. When software is released into the test environment with a monthly build, it must be run and tested against external systems; the Contractor and the UIMOD Project Office will provide a combination of test external systems, in addition to "dummy" interfaces, that simulate external interfaces. These interface stubs will act as test harnesses for the external interfaces until the real interfaces (both development and production) are developed.

6B.8.1   General Testing Requirements

Requirement Number	Description	Bidder Agrees (Y/N)
213	Testing or development shall not be performed in the production environments.	
214	The Contractor must use automated testing tools for a percentage of the testing specified in the Master System Test Plan.	
215	The testing process shall model component behavior in order to anticipate conflicts with shared resources.	

Requirement Number	Description	Bidder Agrees (Y/N)
216	The Contractor shall repeat at least the previous stage of testing when a failure occurs at any stage of testing (i.e., a failure in Integration/String Testing requires that Unit Testing be repeated, a failure in System Testing requires that Integration/String Testing be repeated). The extent of this Regression Testing will be contingent on the analysis of the root cause of the testing failure, and will be subject to the approval of the UIMOD Project Office.	
217	The Contractor shall execute regression testing defined as "testing performed to ensure program changes do not introduce unintended consequences, such as negatively affecting performance or existing system functionality so that it stops working or no longer works in the same way as it did previously."	
218	The Contractor shall be responsible for building test plans, executing test plans, and creating quality reports. The UIMOD Project Office will evaluate the Contractor test plans, and Contractor test results, as well as validate the testing done by augmenting it with their own testing.	
219	With each of the delivery types, various levels of testing shall be required to help ensure system quality throughout the life of the project. Additionally, because data used in the UI program is date or time period sensitive, testing shall include various date and time scenarios. This shall require changing the system date and time as necessary, as well as changing time sensitive data to make it relevant to a new time period. This has been a challenge in the past because EDD's current test environments share resources making it impossible to completely control system date and time.	
220	The Contractor shall make staff available to the UIMOD Project Office during the course of Pre-Production testing in order to answer any questions and/or to address any problems that may arise.	
221	The Contractor shall refine the test procedures and scripts throughout the life of the system to reflect the as-built design and current requirements.	
222	The Contractor shall allow DTS/EDD to run validation and testing software against externally-facing internet applications to help identify potential security issues, and must agree to repair any deficiencies found during this testing. DTS currently uses WebInspect to test internet applications for security and vulnerability issues.	

6B.8.2   Test Material Packets

Requirement Number	Description	Bidder Agrees (Y/N)

223	The Contractor shall develop Test Materials Packets for each release to include, as a minimum, the following:
	
	a) Test Cases, in accordance with IEEE 829-1998, Standard for Software Test Documentation, Paragraph 6, Test-Case Specification.
	
	b) Test Procedures, in accordance with IEEE 12207.1-1997, Paragraph 6.28, Test or Validation Procedures. In addition to all IEEE content, test scripts shall include, at a minimum:
	  1. Roles and responsibilities of both the Contractor and State personnel.
	  2. Application scripts and operating system scripts.
	  3. Constraints.
	  4. Initialization.
	  5. Termination.
	  6. Actions to perform in case of error.
	  7. Data analysis procedures.
	  8. Interfaces exercised.
	
	c) Automated Test Scripts (not required for unit test or integration test) in accordance with IEEE 12207.1-1997, Standard for Information Technology – Software Life Cycle Processes – Life Cycle Data, Paragraph 6.28, Test or Validation Procedures.
	
	d) Test Data in accordance with IEEE 829-1998, Standard for Software Test Documentation.	

6B.8.3   Test Results Packets

Requirement Number	Description	Bidder Agrees (Y/N)
224	The Contractor shall develop Test Results Packet for each Test Material Packet created and shall include, as a minimum, the following: a) Transmittal Report based on IEEE 829-1998, Standard for Software Test Documentation, Paragraph 8, Test-Item Transmittal Report b) Test Log based on IEEE 829-1998, Standard for Software Test Documentation, Paragraph 9, Test Log c) Incident Report based on IEEE 829-1998, Standard for Software Test Documentation, Paragraph 10, Test-Incident Report d) Summary Results Report based on IEEE 829-1998, Standard for Software Test Documentation, Paragraph 11, Test-Summary Report and IEEE 12207.1-1997, Standard for Information Technology – Software Life Cycle Processes – Life Cycle Data, Paragraph 6.29, Test or Validation Results Report.	

6B.8.4   Test Types

Different types of testing shall be required during the course of the project. In addition to the Contractor testing in a Test environment, A Pre-Production Release shall be required to undergo and successfully pass rigorous testing before release to the production environment.

The different types of system testing are described below; each designed to test different aspects of the system. Most of the testing types will be the responsibility of the Contractor, but some (e.g. User Acceptance) will be the responsibility of the UIMOD Project Team.

Table 6B.2 – Test Types

Test Type	Description	Emphasis of Test	Build/ Owner
Unit	Scope: Individual Code Units/Groups of Code Units Environment: Development Data: Artificial (Data created to follow a code path or test specific test cases)	Every line of code exercised All error paths Code inspection of non-testable paths Small groups of modules that are functionally related Inter-module/intra-function interfaces	BUILD: Checkpoint, Quality OWNER: Contractor
Smoke	SCOPE: Subset of System ENVIRONMENT: Development/Test DATA: Simulated	Verify major functionality delivered with a build works at a surface level Not comprehensive Used to verify that no major errors exist with build, and that more detailed testing can occur	BUILD: Checkpoint, Quality, Pre-Production OWNER: Contractor
Integration/String	Scope: Functional Groupings Environment: Development/Test Data: Simulated (Data created to model real data)	Major functional areas Inter-function interfaces Basic business cases and workflows Critical external interfaces	BUILD: Quality OWNER: Contractor, UIMOD to assist

Test Type	Description	Emphasis of Test	Build/ Owner
Function	Scope: Entire System, End-to-End Environment: Testing, and Pre-Production environment Data: Real – (data that was cleansed and converted from legacy)	Entire System Verify all requirements (functional and technical) Verify common error cases User testing of business workflows	BUILD: Quality, Pre-Production OWNER: Contractor on Quality Builds, UIMOD/EDD with Pre-Production Releases
System	Scope: Entire System, End-to-End Environment: and Pre-Production environment Data: Real – (data that was cleansed and converted from legacy)	Entire System Verification that external interfaces meet both functional and technical requirements Verify data conversion results and data load programs	BUILD: Pre-Production OWNER: UIMOD/EDD with Pre-Production Releases (This is not a Contractor deliverable)
Security	Scope: Security Requirements Environment: Testing environment Data: Real – (data that was cleansed and converted from legacy)	Verify security requirements are met Assess vulnerability to system penetration Verify identified malicious attacks cannot compromise system	BUILD: Quality, Pre-Production OWNER: Contractor
Performance	Scope: Performance Requirements Environment: Testing environment Data: Real – (data that was cleansed and converted from legacy)	Verify performance requirements are met Verify no degradation of performance between releases	BUILD: Quality, Pre-Production OWNER: Contractor
Stress	Scope: Testing the system under stress Environment: Testing environment Data: Simulated (Data created to model real data)	Ensure system can handle anticipated peak loads Determine load levels that cause the system to fail	BUILD: Quality, Pre-Production OWNER: Contractor

Test Type	Description	Emphasis of Test	Build/ Owner
Regression	Scope: Verify other areas of the system have not been adversely affected Environment: Testing, Pre-Production environment Data: Real – (data that was cleansed and converted from legacy)	Ensure system performs as expected Verify normal and critical workflows and processing paths Verify user reports	BUILD: Quality, Pre-Production OWNER: Contractor
User Acceptance	Scope: Typical User Scenarios Environment: Pre-Production environment Data: Real – (data that was cleansed and converted from legacy)	Does the system address the users' needs? May do formal regression testing of fixed errors from System testing for users Workflow and business scenarios	BUILD: Pre-Production OWNER: UIMOD/EDD, with Contractor assistance

6B.8.5 Smoke Testing

The Smoke Test is a simple set of tests used to ensure that the major functionality delivered with a build works. The name is derived from electronics testing: a *smoke test* is the first time a circuit is attached to power, which shall sometimes produce actual smoke if a wiring mistake has been made. In software development, *smoke testing* is a preliminary to further testing, which should reveal simple failures severe enough to reject a prospective software release.

Requirement Number	Description	Bidder Agrees (Y/N)
225	The Contractor shall develop, deliver, and maintain the following documentation with each Checkpoint, Quality, and Pre-Production build: a) Smoke Test Materials Packet. b) Smoke Test Results Packet. c) Contractor Certification of Successful Smoke Test Completion.	
226	The Contractor shall test each software unit and database in accordance with the Master System Test Plan. Smoke testing shall include at least the following: a) One test for each system component delivered. This applies to both hardware and software components. b) Application of all previous applicable smoke tests, used to ensure that new features do not introduce defects into existing, working, system components.	

Requirement Number	Description	Bidder Agrees (Y/N)
227	The contractor shall add every smoke test to the set of regression smoke tests that shall be applied to each Checkpoint build.	

6B.8.6   Unit Testing

The Unit Test ensures the software units can compile and function in a test environment with simulated interaction with other software units. Unit testing also includes testing of small groups of modules that are functionally or logically related, verifying the interfaces between the related modules perform correctly, and verifying utility functions or modules work correctly when called by various modules.

Requirement Number	Description	Bidder Agrees (Y/N)
228	The Contractor shall develop, deliver, and maintain the following documentation with each Quality build: a) Unit Test Materials Packet. b) Unit Test Results Packet. c) Contractor Certification of Successful Unit Test Completion.	
229	The Contractor shall test each software unit and database in accordance with the Master System Test Plan. The Contractor shall verify by code-inspection those items or paths that are not feasible to test. Unit testing shall include, but not be limited to, the following: a) Execution of every new or modified code path. b) Code inspection for critical items that do not have an observable outcome. c) Screen and report formats verification. d) Full range of values tested for data entry fields. e) All error cases verified and required to end gracefully with the appropriate error data reported. f) All return values verified to ensure they are correctly generated under the correct circumstances. g) Verification that units "clean up" after themselves, releasing any system resources, as appropriate. h) Verification of the correct passing and setting of parameters as they pass between modules. i) Verification that the design is correctly implemented. j) Verification of the functional outputs or module exit values. k) Verification of adherence to Software Engineering Standards.	

6B.8.7   Function Testing

Function Testing ensures the system or components provide the necessary functionality to satisfy the business functional and technical requirements.

Requirement Number	Description	Bidder Agrees (Y/N)
230	For functional testing, the Contractor shall provide a test environment that contains all the components and functionality of the production environment for testing builds of CCNPAU and CCR.	
231	The Contractor shall develop, deliver, and maintain the following documentation with each Quality and Pre-Production build: a) System Test Materials Packet. b) System Test/Functional Requirements Traceability Matrix. c) System Test Results Packet. d) Contractor Certification of Successful System Test Completion.	
232	Function testing shall include the following: a) Verify that all planned tests are executed until a successful test is conducted. b) Verify end-to-end workflows and scenarios. c) Final verification of requirements and design included with the delivered build/release. d) Verify any non-testable items. e) Verify help files and training materials.	
233	The Function Testing completion criteria shall include the following: a) Demonstration of successful execution of all test scripts. b) Demonstration that the system is stable within the test environment. c) Demonstration that the appropriate level of Configuration Management has been applied to all impacted Configurable Items.	
234	The Contractor shall maintain the automated test tool and automated scripts under configuration management control for the lifetime of the Contract. The Contractor shall provide access including but not limited to the State staff as designated by the State Project Manager for testing.	
235	The Contractor and UIMOD Project Office shall perform a Function Test Review including performance and stress test review in accordance with the Milestone Review process.	

6B.8.8   Integration/String Testing

To ensure consistent test results, the Contractor combines units into their functional components and conducts the testing in an environment that simulates the production environment with scripted data and business scenario inputs and interfaces. The term "String" testing comes from the mainframe world, where "String Testing" is defined as the testing of the combined parts of an application to determine if they function correctly. The "parts" can be code modules, individual applications, or multiple applications running on different computers.

The Contractor is responsible for both testing that dependant software components work correctly together, and also ensuring that external interfaces are communicating correctly.

Requirement Number	Description	Bidder Agrees (Y/N)
236	The Contractor shall develop, deliver, and maintain the following documentation with each Quality build: a) Integration/String Test Materials Packet. b) Integration/String Test/Functional Requirements Traceability Matrix. c) Integration/String Test Results Packet. d) Contractor Certification of Successful Integration/String Test Completion.	
237	The Contractor shall test the hardware and software in accordance with the Master System Test Plan. Integration/String Testing shall include, but not be limited to, the following: a) The verification of each functional area and inter-functional interfaces. b) Demonstration that all requirements have been verified and all testable requirements have been verified. c) Demonstration that hardware specifications and COTS software components have been verified for correctness and compliance with specifications. d) Demonstration that external interfaces have been verified.	
238	The system date may actually reside in multiple systems in a distributed environment and may be difficult or impossible to change if other applications also reside on any of those servers. The testing infrastructure shall accommodate the testing need to synchronize the system date throughout each component.	

6B.8.9   Performance Testing

Performance Testing shall be done to demonstrate the System or components meet performance criteria and do not introduce unacceptable degradation in system performance.

Requirement Number	Description	Bidder Agrees (Y/N)
239	The Contractor shall provide tools or integrated capacity for load modeling and stress/load testing so that EDD can test the capacity of the initial installation as well as future enhancements and expansions to all components of the UIMOD system.	
240	The Contractor shall test the resource and performance impact of new hardware and software releases in a testing environment that simulates performance of the production environment. The Contractor shall measure and establish baseline system performance metrics. The Contractor shall test application and hardware updates to ensure there is no unacceptable degradation in performance introduced by the system changes by measuring the new system performance against baseline performance metrics.	
241	For each type of performance testing online, batch and stress, the Contractor shall prepare and deliver the following with each Quality, and Pre-Production build: a) Performance Test Materials Packet. b) Performance Test Results Packet. c) Contractor Certification of Successful Test Completion.	
242	The Contractor shall collect and report metrics during the performance tests including, but not limited to, the following: a) System resource utilization (CPU, Disk, Memory and Network) on the enterprise system and the test workstations. b) System and User Response times as defined in Section 6C, Technical Performance, for individual functions. c) Length of time each function spends in each component of the system Client, network bandwidth, and server.	

6B.8.10 Stress Testing

The Stress Test shall ensure that the System can maintain performance requirements when under high workload and peak usage.

Requirement Number	Description	Bidder Agrees (Y/N)
243	Prior to the application going live, the Contractor shall develop and deliver the following with each Quality, and Pre-Production build: a) Stress Test Materials Packet. b) Stress Test Results Packet. c) Contractor Certification of Successful Stress Test Completion.	
244	The Stress Test shall ensure that the system can maintain performance requirements when under peak usage taking into account the number of concurrent users, number of transactions executing, CPU usage, disk usage, and network traffic. If approved by the State Project Manager, the Contractor shall execute the Stress Test and report the results to the State Project Manager in a Stress Test Results Packet based on IEEE 829-1998, Standard for Software Test Documentation, Paragraph 8, Test-Item Transmittal Report and IEEE 829-1998, Standard for Software Test Documentation, Paragraph 10, Test Incident Report. At a minimum the tests shall prove that: a) The system has the ability to support the full-anticipated user community working under normal conditions while meeting the performance requirements defined in Section 6C, System Performance. b) Any batch processing cycle does not impede system availability and online performance requirements. c) That performance metrics can be met over the Wide Area Network (WAN) connectivity specified. d) There is reasonable system capacity available for peak processing periods taking into account the number of concurrent users, number of transactions executing, CPU usage, disk usage, and network traffic. e) There are no previously undiscovered system errors, such as memory leaks, that would only be detected under load testing.	
245	The Stress Test shall identify the transaction volumes at which the system performance fails to meet performance requirements. The types of transactions will be identified by the Contractor, and will represent "normal" transactions. Transactions used in stress testing will be subject to the approval of the UIMOD Project Office.	

6B.8.11 Security Testing

Security Testing will be performed to ensure that vulnerabilities -- to both external clients and internal users -- are identified.

Requirement Number	Description	Bidder Agrees (Y/N)
246	With each Quality build, the Contractor shall perform Security Testing in order to ensure that the System does not expose EDD and/or its stakeholders to security risks. Security tests shall include, but not be limited to: a) Verification that security infrastructure requirements (e.g. Kerberos authentication) have been met. b) An External and internal vulnerability assessment, as defined in NIST 800-42. c) Penetration testing, as defined in NIST 800-42. d) Web Services vulnerability testing that includes, but is not limited to, vulnerabilities defined in Appendix B of NIST 800-95.	
247	For each type of security testing performed the Contractor shall prepare and deliver the following with each Quality, and Pre-Production build: a) Security Test Materials Packet. b) Security Test Results Packet. c) Contractor Certification of Successful Test Completion.	
248	The Contractor shall provide tools and training for security testing so that EDD can test for security vulnerabilities of the initial installation, as well as future enhancements and expansions to all components of the UIMOD system.	

6B.8.12 User Acceptance Testing

The UIMOD Project Office shall be responsible for performing User Acceptance Testing of all hardware and software releases delivered to the pre-production environment by the Contractor. The Contractor shall provide test scripts to the UIMOD Project Office part of the delivery that accompanies a Pre-Production Release.

Requirement Number	Description	Bidder Agrees (Y/N)
249	A complete end-to-end test of the system shall be performed by the Contractor on the Contractor's Test environment without failure before the Contractor's acceptance testing shall be considered completed, and a delivery can be made to the EDD Pre-Production environment.	

Requirement Number	Description	Bidder Agrees (Y/N)
250	The User Acceptance Testing (UAT) shall include detailed test scripts developed by the Contractor and delivered with each Pre-Production release, which address the following: a) All facets of the system's operations specific to that release. b) Tests that exercise all of batch/online interface processing; transaction processing; system security, edits, and controls; backup and recovery; error processing; and system reporting. c) All system reports and forms, including daily, monthly, quarterly, and annual are generated for review. d) Automated test scripts used by the Contractor to test the release prior to delivery to EDD. At EDD's discretion, EDD may choose to use automated testing scripts developed by the Contractor. e) Detailed test scripts developed by the UIMOD Project Office and/or EDD Testing Staff. f) Regression testing developed by the UIMOD Project Office and/or EDD Testing Staff.	
251	The Contractor shall support the UIMOD Project Office execution of a thorough User Acceptance Test. This test shall verify that the application is functioning as required in this Contract for all users statewide. The Contractor shall provide the following in support of User Acceptance Testing: a) System support for the User Acceptance Testing environment to include loading of converted and production data. b) System support for installation and configuration of tools necessary to execute tests defined in the Stress Test Plan. c) System support for installation and configuration of tools necessary to execute tests defined in the Performance Test Plan.	
252	The formal acceptance of the system shall be contingent upon successful completion of the testing specified in the Master System Test Plan.	

6B.8.13 Regression Testing

Regression Testing ensures that functionality delivered with a build does not cause defects in previously implemented and tested system functionality.

Requirement Number	Description	Bidder Agrees (Y/N)
253	The Contractor shall conduct regression testing to ensure that functionality delivered with a build does not cause defects in previously implemented and tested functionality. The regression test cycle shall be repeated for each incremental development effort. The Contractor shall conduct regression testing with every Quality build, in accordance with the Master System Test Plan.	

Requirement Number	Description	Bidder Agrees (Y/N)
254	Regression Testing shall include, but not be limited to, the following: a) Determining the extent of verification and validation analyses and tests that shall be repeated when changes are made to any previously examined software products. b) Assessing the nature of the system change to determine potential ripple or side effects and impacts on other aspects of the system. c) Rerunning test cases based on changes, error corrections, and impact assessment, to detect errors spawned by system changes. d) Verification that the system has not been affected negatively or unexpectedly by changes. e) Comparison of results from previous releases to current test results.	
255	The Contractor shall develop, deliver, and maintain the following documentation with each Quality and Pre-Production build: a) Regression Test Materials Packet. b) Regression Test/Functional Requirements Traceability Matrix. c) Regression Test Results Packet. d) Contractor Certification of Successful Regression Test Completion, including State approvals.	
256	The Contractor shall maintain and keep under configuration management all Regression Test cases. Test cases shall be annotated for application, assumptions, initial conditions, and expected results.	
257	The Regression Testing completion criteria shall include, but not be limited to, the following: a) Demonstration of successful execution of all test scripts. b) Demonstration that the system is stable within the test environment. c) Demonstration that the appropriate level of Configuration Management has been applied to all impacted Configurable Items.	

6B.9   Solution Delivery - Implementation

The Contractor is expected to deliver builds every 30 days. These 30-day builds are called Checkpoint Builds and have minimal acceptance requirements.

Every third build delivered by the Contractor requires a demonstration of both working and tested hardware and software. These 90-day builds are labeled Quality Builds.

When the Contractor has assembled and tested enough hardware and software to satisfy the requirements for a release to the production environment, the Contractor will assemble and work with the UIMOD project office to have it installed into the Pre-Production environment.

When testing in the Pre-Production environment is completed, the Contractor will

deliver a Pre-Production release to the UIMOD Project Office for release to production.

6B.9.1 Legacy Software Modifications & Constraints

6B.9.1.1 Legacy Software Modifications

Successful integration with the legacy mainframe system will be one of the most complex tasks of the project. UIMOD Project and EDD resources will be at the Contractor's disposal to assist with legacy understanding, and to make modification to legacy mainframe systems.

Requirement Number	Description	Bidder Agrees (Y/N)
258	The Contractor shall be responsible for leading and coordinating the integration of the new and legacy system.	
259	The Contractor shall identify legacy modifications needed to integrate the new and legacy components.	
260	The Contractor shall be responsible for leading and coordinating the review of legacy software and the extraction of business rules.	
261	All extracted business rules will be, subject to the review and approval of the UIMOD project team.	
262	The Contractor shall be responsible for leading the development of the interfaces to external systems.	
263	The Contractor will identify any legacy modifications required for the new CCR System and external systems to exchange data, and the UIMOD Project Team will be responsible for implementing requested legacy software changes.	

6B.9.1.2 Legacy Software Modification Constraints

The following are constraints that are placed on the modifications made to legacy software:

1. All modifications to EDD legacy code will be developed, tested, and deployed by the State.
2. The staging of legacy code changes resulting from the State will be managed by the State.
3. The impact of migration of CCR business logic to the new technology on EDD legacy applications will be determined by the State.
4. Manual data cleansing of EDD legacy data files/DB will be performed by the

State.

5. The State will work with the Contractor to coordinate the testing of modified EDD legacy code with the new UIMOD .NET code.

6. Model/dictionary/and or format of EDD legacy data, including field length, type, description, and relationships to other data will be provided by the State.

6B.9.2   General Implementation Requirements

Requirement Number	Description	Bidder Agrees (Y/N)
264	All software shall be documented using common self-documenting language features (e.g., NET C# XML documentation directives) so that documentation can be generated from the source code.	
265	All software shall be built according to Microsoft Visual Studio coding standards. (See Bidders' Library, ~~for MS Visual Studio Coding Standards~~Reference Miscellaneous folder, Microsoft Visual Basic Coding Conventions.)	
266	The Contractor shall follow the EDD database naming and usage guidelines for all SQL Server databases. (See ~~"SQL Server Naming Conventions and Standards" in the~~ Bidders' Library, Reference DTS/EDD folder, EDD SQL Server Database Naming Conventions and Standards, for the current standards.)	
267	The Contractor shall provide detailed configuration information that describes the contents of the release, including any software and hardware dependencies, for both the hardware and software delivered with the Quality builds and the Pre-Production releases.	
268	The Contractor shall provide detailed build instructions to a level of detail that can recreate the environment with no outside assistance for both the hardware and software delivered with the Quality builds and the Pre-Production releases.	
269	The Contractor shall provide detailed configuration information for any 3rd party hardware and software delivered with the Quality builds and the Pre-Production releases	
270	The Contractor shall provide updated documentation when system upgrades to software or equipment occurs through the life of the contract.	
271	The Contractor agrees that all materials and documents that are developed as part of the UIMOD project shall become the property of the State. Materials and documents copyrighted prior to the date of contract signature are exempted from this provision.	
272	The Contractor shall provide the UIMOD Project Office access to the software components and documentation in sufficient detail in order for the UIMOD Project Office to develop custom test harnesses for the development system.	
273	No EDD UI production system resources (data or source files), or data derived from the production system resources, may be used off-site without authorization from the UIMOD project director.	

Requirement Number	Description	Bidder Agrees (Y/N)
274	With every build or release, the Contractor shall provide a Build Description that contains the following: a) Architecture or Design updates. b) New functionality introduced with the build. c) Defects fixed. d) Other changes to existing code. e) Hardware configuration changes.	
275	With every build or release, the Contractor shall provide a Build Manifest that contains the following: a) Description of the build structure and contents (e.g. classes, files, hardware, hardware configuration, and documentation). b) Instructions for assembling and/or configuring the components of the build.	
276	One week prior to the delivery of a build, the Contractor shall provide a proposed Task List that contains the list of items, and a description of each item, that shall be delivered with the next build. This task list will be subject to the review and approval of the UIMOD Project Office.	
277	With the delivery of a build, the Contractor shall provide a finalized Task List that contains the list of items, and a description of each item, that shall be delivered with the next build. This task list will be subject to the approval of the UIMOD Project Office.	
278	The Contractor shall not change the scope of a build as defined by the monthly task list.	

6B.9.3   Code Reviews

Requirement Number	Description	Bidder Agrees (Y/N)
279	The Contractor shall hold code reviews for selected, high-risk software components and/or services after each Quality build. The Contractor will identify, and EDD will approve and modify, specific code modules to review.	
280	The Contractor shall hold code reviews that conform to IEEE 1028-1997, Section 7, Walkthroughs.	
281	A summary report of each code review shall be created by the Contractor with action items assigned to the Contractor team requiring completion before the next Quality build can be accepted, and before the build being reviewed can be submitted to the pre-production environment.	

6B.9.4   Data Conversion

The Contractor will be responsible for converting all data required from the legacy environment to the new UIMOD system. It is anticipated that this will primarily be the

UI data residing in the SCDB – the Mainframe IDMS database.

While the Contractor will use their own tools and methodology for converting the legacy data, the UIMOD Project Office will be providing dedicated resources to assist the Contractor in understanding the legacy data, and in assisting the Contractor in resolving problems related to the data conversion efforts.

Requirement Number	Description	Bidder Agrees (Y/N)
282	The Contractor shall be responsible for converting data from the legacy database(s) as required to support the new UIMOD system.	
283	**Data Conversion Release**: With each Pre-Production Release that requires use of data converted from the legacy environment, the Contractor shall provide an updated Data Conversion Release document. This document must include the following: a) A description of the field mappings, tools, and programs used to support data conversion. b) A description of data that was validated and tested. c) A description of how data anomalies and errors were addressed. d) A description of the resources and tools used to create the converted data. e) The configuration information for the tools and scripts used to produce the converted data. f) A description of any data conversion issues that may impact the production environment.	

6B.9.5   Checkpoint Builds

The tables below describe the requirements for each type of build: Monthly Checkpoint builds, Quarterly Quality builds, and Pre-Production/Production releases as decided by the Contractor and the UIMOD Project Office.

Requirement Number	Description	Bidder Agrees (Y/N)
284	The Contractor shall provide deliveries of system hardware and software to the Test environment every 30 days or as agreed. This shall be called a "Checkpoint build". Each build shall include the following: a) Build Description b) Build Manifest c) Smoke Test Plan d) Smoke Test Plan execution results e) Updated Implementation Plan f) Updated System Architecture g) Updated Detailed Design h) Task List for the next build	
285	Any proposed changes to the schedule of 30-day Checkpoint builds and 90-day Quality builds shall be approved by the UIMOD project team at least 10 days before the next scheduled delivery date.	
286	The Contractor shall deliver the first Checkpoint build within the first 90 days of the project initiation, and the first Quality build 90 days after the first Checkpoint build.	

6B.9.6   Quality Builds

Requirement Number	Description	Bidder Agrees (Y/N)
287	Every third build shall be considered a Quality build. The Contractor shall deliver each Quality Build with the following deliverables, for the UIMOD project team review and approval: a) Build Description b) Build Manifest: c) Unit Test Plan, and execution results: d) Smoke Test Plan and execution results e) System Test Plan and execution results: f) Regression Test Plan and execution results g) Updated Implementation Plan h) Updated System Architecture i) Updated Detailed Design j) Task List for the next build	

Requirement Number	Description	Bidder Agrees (Y/N)
288	With each Quality build, the Contractor shall place all test files, test tools, specific versions/units and results under UIMOD Configuration Management as described in the Configuration Management Plan and Change Management requirements section.	
289	With each Quality build, the Contractor shall hold a review meeting to introduce the new or modified system components delivered with that build.	
290	The first Quality build shall include a baseline system architecture and detailed design that shall be submitted to UIMOD Project Office for review. When these documents have been accepted by the UIMOD Project Office, the design phase will be formally completed.	

6B.9.7   Pre-Production Releases

When functionality is ready to be delivered to the UIMOD Project Office for acceptance testing, it shall be delivered in the form of a Pre-Production Release (not a build). Since the UIMOD Project Office will perform acceptance testing and approve all releases into production, a pre-production release is equivalent to a production release and requires the rigor associated with a production release.

When hardware and software features have completed development and testing, the Contractor must deliver Pre-Production releases to the Pre-Production environment. Upon successful completion of user acceptance testing, UIMOD Project Office will schedule a release to be moved to the Production environment.

Implementation is expected to be incremental from both a business process and applied technology perspective. The UIMOD Project Office will be accepting the products into the production environment through application of the acceptance criteria testing plans. For releases that include hosting either servers at DTS, or that impact the data network provided by DTS, representatives of DTS will have been trained, and their own internal checklists will have been met prior to a production release date being scheduled.

Requirement Number	Description	Bidder Agrees (Y/N)
291	When development of functionality has been completed and is ready to be delivered to the UIMOD Project Office for acceptance testing and production implementation, it shall be delivered in the form of a Pre-Production Release. Each release shall include the following: a) Release-specific Hardware and Software solution components b) An updated Data Conversion Release document c) Release Description d) Release Manifest e) Unit Test Plan and execution results. f) Smoke Test Plan and execution results. g) System Test Plan and execution results: h) Interface Test Plan and execution results. i) Performance Test Plan and execution results. j) Stress Test Plan and execution results. k) Security Test Plan and execution results l) Regression Test Plan and execution results.	
292	The Contractor shall deliver a traceability matrix for all delivered functionality, showing all testing activities tracing to delivered functionality, and all delivered functionality tracing to requirements in Requisite Pro.	
293	The Contractor shall provide detailed hardware and software configuration instructions with Pre-Production releases. These configuration instructions shall be at a level of detail that EDD system administration staff can rebuild and configure the hardware environment without outside assistance.	
294	With each pre-production release, the Contractor shall provide database documentation that conforms to EDD Standards. (See "~~SQL Server: New Project Database Documentation Requirements "in the~~ Bidders' Library, Reference DTS/EDD folder, SQL Server: New Project Database Documentation Requirements. ~~for the current Standards?~~)	
295	The Contractor shall ensure that each interface to an external system is working correctly. Any problem in the external systems shown to be caused by the external interface will be repaired by the Contractor.	

6B.9.8   Organizational Change Management Support

The deployment of the new System into the production environment will create organizational impacts that will need to be considered as the project progresses. It is the State's expectation that the UIMOD Project Office and the Contractor will work collaboratively to ensure the new System is deployed with minimal impact to the organization.

Requirement Number	Description	Bidder Agrees (Y/N)
296	The Contractor shall develop an Organizational Change Management Plan that documents, as a minimum, the following areas: a) The processes the Contractor will employ to support the introduction of technical process changes that will impact the State environment as a result of the new system. b) Pre-defined migration processes for software releases, operating system upgrades, layered software upgrades, and hardware configuration changes. c) Steps required minimizing resistance to, and maximizing adoption of, the new system and related new processes by the end-users and maintenance team members of the system (call center and EDD's IT Branch). d) A proposed schedule for implementing Organizational Change Leadership. e) The Contractor shall utilize the same prioritization model as the UIMOD Project Office between Resources (being not flexible), Schedule (being somewhat flexible), and Scope (being the most flexible) when assessing and recommending production release dates and organizational change activities.	
297	The Contractor shall support the UIMOD Project in facilitating and executing Organizational Change Management activities based on the approved Organizational Change Management Plan.	

6B.9.9   Knowledge Transfer and Training

The UIMOD Project will introduce new systems, processes and procedures to the EDD environment. The new systems will utilize new technologies on platforms substantially different from the legacy environment. Knowledge transfer and staff training will be a critical component for success.

In addition, knowledge transfer and training will be divided into specific types to facilitate the organizational needs as follows:

1. CCNPAU End-User Training and Train-the-Trainer Training for UIB Program staff.

2. CCNPAU Knowledge Transfer and Technical Training for UIB UIRMO technical support staff.

3. CCNPAU Knowledge Transfer and Technical Training for ITB technical support staff.

4. CCR Train-the-Trainer Training for UIB Program staff.

5. CCR Knowledge Transfer Training for ITB technical support staff.

It will be important for the UIMOD Project Office and the Contractor to work collaboratively in developing and implementing the knowledge transfer and training program that will satisfy all the project needs, including security management and operations. The following requirements spell out the training needs for the UIMOD Project.

6B.9.9.1   Master Knowledge Transfer and Training Plan

Requirement Number	Description	Bidder Agrees (Y/N)
298	The Contractor shall develop (in cooperation with the UIMOD Project Office) a Master Knowledge Transfer and Training Plan to describe the approach for bringing managers, end users and technical personnel to a familiar level of understanding with how the new system works and how it differs from the system being replaced.	
299	The Master Knowledge Transfer and Training Plan shall address, as a minimum, the following topics: a) Training goals/standards and the specific plan for training technical personnel and end users. b) Strategy for providing training early in the project to allow the training goals to be implemented throughout the project life cycle. c) Tasks, deliverables and resources necessary to complete the training effort and identify tools and documentation that shall be necessary to support proposed effort. d) The different types of training, the specific courses and course materials, the training approach for both technical personnel and end users, and how training effectiveness shall be measured and addressed. e) A description of deliverables to support initial and ongoing training including user manuals, system manuals, and on-line help and training materials for technical/non-technical personnel. f) Knowledge Transfer to enable State personnel to operate, maintain, configure and modify the new systems including operation of the testing tools, supporting infrastructure, and security. g) Metrics for tracking progress in achieving training and knowledge transfer objectives. h) Reporting progress of training and knowledge transfer activities. i) Approved recommendations for both training and knowledge transfer resulting from the organizational change readiness assessment.	

6B.9.9.2 Knowledge Transfer / Training Environment

Requirement Number	Description	Bidder Agrees (Y/N)
300	The Contractor shall procure hardware and software for the UIMOD Knowledge Transfer /Training Environment.	
301	The Contractor shall work with the UIMOD Project Office to install and configure the UIMOD Knowledge Transfer / Training Environment.	
302	The Contractor shall develop a UIMOD Knowledge Transfer /Training Environment for State staff to get hands-on experience without altering production data.	
303	The UIMOD Knowledge Transfer /Training Environment shall be a production-like environment with the following features: a) Capability to refresh data and change time sensitive data to make it relevant to a new time period. b) The ability to update the data for relevance in the new time period and not recreate the data from scratch every time. Downloading or retrieving current production data is not an alternative. Any downloading of production data would require a data masking process to remove any possibility of identifying the original claimant or employer information. c) Allows authorized state staff to change the system date to simulate different business cycles. d) Offers the capability to manage and track the training data. e) Limits administration of the environment to those authorized to manage that environment. f) Contain all the components and functionality of the production environments.	
304	The Contractor shall update the UIMOD Knowledge Transfer /Training Environment to reflect all application releases and modifications in the production environments.	
305	The Contractor shall make the UIMOD Knowledge Transfer /Training Environment available via the user desktops and telephones to UI Central Office, field staff and designated training facilities.	
306	The Contractor shall provide the option to release functionality to the UIMOD Knowledge Transfer /Training Environment prior to release to the production environment.	
307	The Contractor shall provide automated tools for loading data into the UIMOD Knowledge Transfer /Training Environment.	
308	The Contractor shall provide automated tools for restoring the data to an identified state in the UIMOD Knowledge Transfer /Training Environment. For example, backup and restore.	
309	The Contractor shall provide automated tools for updating the UIMOD Knowledge Transfer /Training Environment data, including updating date sensitive data in preparation for establishing a new "identified state" of the data.	

6B.9.9.3 General Training Requirements

Requirement Number	Description	Bidder Agrees (Y/N)
310	The Contractor shall provide Training Manuals for all classroom training they provide.	
311	The Contractor shall provide the UIMOD Project Office a training course outline for review and acceptance at least 30 days prior to the scheduled training.	
312	The Contractor shall submit all training packages to the UIMOD Project Office for review and acceptance at least 21 days prior to the scheduled training.	
313	The Contractor shall provide all training materials developed for the UIMOD systems to the UIMOD Project Office. Those materials shall become the property of EDD and may be modified and duplicated by EDD.	
314	The Contractor shall provide electronic copies of all training materials (end-user, technical, trainee and instructor) in a format that can be updated and printed by EDD staff using software for which EDD owns licenses.	
315	The Contractor shall provide updated training documentation as necessary to incorporate new processes or functionality due to system releases, upgrades or changes.	
316	The Contractor shall schedule all training during regular work hours, unless the Contractor receives advance approval from the UIMOD Project Office for specific training at other times.	
317	The Contractor shall provide instruction to the UIMOD Project Office and State staff on Contractor tools and procedures used to support the Project.	
318	The Contractor shall provide all training within the State of California.	
319	The Contractor shall ensure that Contractor staff are not assigned to train state staff and work on critical path development tasks concurrently.	
320	The Contractor shall provide end-user training documentation in written manuals, on a stand-alone compact disc, and online, as part of a help facility for the system.	
321	The Contractor shall schedule UI field staff training in a manner that is least disruptive to the business processes.	

6B.9.9.4   Type 1: CCNPAU UIB Program Staff

Requirement Number	Description	Bidder Agrees (Y/N)
322	The Contractor staff shall train UI field trainers from each Center (up to 30 staff) in CCNPAU system functionality. In turn, these trainers shall be responsible for training agents in CCNPAU functionality implemented in the UCD System.	
323	The Contractor shall provide training at the Call Center sites in the use of telephones for end-users (agents and managers in the Call Centers). Refer to RFP Section 6C, Technical Requirements, Table 6C.2.	
324	The Contractor shall provide training at the Call Center sites to Call Center managers, supervisors, and lead staff (up to 30 staff) in local management of the CCNPAU system, including use of the UCD operational reporting tool.	
325	The Contractor shall provide just-in-time end-user CCNPAU training prior to and not more than 15 days prior to functionality implementation at the end-users jobsite.	
326	The Contractor shall provide a minimum of one telephone end-user training material packet per telephone set installed by the Contractor. Refer to RFP Section 6C, Technical Requirements, Table 6C.2.	
327	For any end-user training provided by the Contractor, the Contractor shall provide a minimum of one training-material packet per trainee.	

6B.9.9.5   Type 2: CCNPAU UIB UIRMO Technical Support Staff

Requirement Number	Description	Bidder Agrees (Y/N)
328	The Contractor shall provide training and ensure knowledge transfer occurs throughout the project as system components are developed and implemented, e.g., mentoring, classroom training, and hands-on training (up to 8 staff).	
329	The Contractor shall develop training to include, as a minimum, the following topics: a) System design and schema. b) System usage. c) System procedures. d) Application and tools development. e) Report generation. f) System administration and maintenance. g) The setup and configuration of all computing environments developed by the Contractor (e.g. CCR, UCD, BI).	

Requirement Number	Description	Bidder Agrees (Y/N)
330	The Contractor shall provide training, as a minimum, for: a) State technical staff who shall be participating in the development and implementation of the CCNPAU and CCR systems. b) State technical staff that will be supporting the UIMOD systems. c) State Help Desk staff that will assist internal end-users with technical support for the UIMOD systems. d) State technical staff on the support and administration of the business rules engine.	
331	For the duration of the contract, the Contractor shall continue to provide training to the State technical staff if system upgrades have been installed and there is a change in system functionality.	

6B.9.9.6 Type 3: CCNPAU ITB Technical Support Staff

Requirement Number	Description	Bidder Agrees (Y/N)
332	The Contractor shall provide training and ensure knowledge transfer occurs throughout the project as system components are developed and implemented, e.g., mentoring, classroom training, and hands-on training (up to 30 staff).	
333	The Contractor shall develop training to include, as a minimum, the following topics: a) System design and schema. b) System usage. c) System procedures. d) Application and tools development. e) Report generation. f) System administration and maintenance. g) The setup and configuration of all computing environments developed by the Contractor (e.g., CCR, UCD, BI).	
334	The Contractor shall provide training, as a minimum, for: a) State technical staff who shall be participating in the development and implementation of the CCNPAU system. b) State technical staff that will be supporting the CCNPAU system. c) State Help Desk staff that will assist internal end-users with technical support for the CCNPAU system.	
335	For the duration of the contract, the Contractor shall continue to provide training to the State technical staff if system upgrades have been installed and there is a change in system functionality.	

6B.9.9.7   Type 4: CCR UIB Program Staff

Requirement Number	Description	Bidder Agrees (Y/N)
336	The Contractor shall assist the UIMOD Project Office (up to 12 staff) in developing training on the CCR system functionality. The UI field team trainers shall train non-technical UI field staff on CCR system functionality and business processes.	
337	The Contractor shall provide end-user training (up to 12 staff) on: a) Business rules engine administration. b) Reporting. c) Data mining tools. d) Fraud analysis. e) Web content management. f) Workflow management. g) The training environment.	

6B.9.9.8   Type 5: CCR ITB Technical Support Staff

Requirement Number	Description	Bidder Agrees (Y/N)
338	The Contractor shall provide training and ensure knowledge transfer occurs throughout the project as system components are developed and implemented, e.g., mentoring, classroom training, and hands-on training (up to 30 staff).	
339	The Contractor shall develop training to include, as a minimum, the following topics: a) System design. b) System usage. c) Database Design and Maintenance. d) System procedures. e) Application and tools development. f) Report generation. g) System administration and maintenance. h) The setup and configuration of all computing environments developed by the Contractor (e.g. CCR, UCD, BI).	
340	The Contractor shall provide training, as a minimum, for: a) State technical staff who shall be participating in the development and implementation of the CCR system. b) State technical staff that will be supporting the CCR system. c) State Help Desk staff that will assist internal end-users with technical support for the CCR system. d) State technical staff on the support and administration of the business rules engine.	

| 341 | For the duration of the contract, the Contractor shall continue to provide training to the State technical staff if system upgrades have been installed and there is a change in system functionality. | |
| 342 | Intentionally left blank. | |

6B.10 Production Releases

The Figure below shows the relationship between pay points, production releases, production support, system acceptance, and M&O.

Note: The dates represented in Figure 6B.3 – Production Releases, Pay Points, Production Support, and System Acceptance represent the State's current schedule for planning purposes (apart from Contractor inputs). These dates will be modified as needed based on inputs from the Contractor.

There will be two (2) System Acceptance events, one for the CCNPAU sub-system and one for the CCR sub-system. These two system acceptance events will mark the final stage of production deployment after the last production release for each of the CCNPAU or CCR sub-systems has been successfully completed.

For more information on Pay Points, refer to section 11.2.7 Pay Points.

Figure 6B.3 – Production Releases, Pay Points, Production Support, and System Acceptance
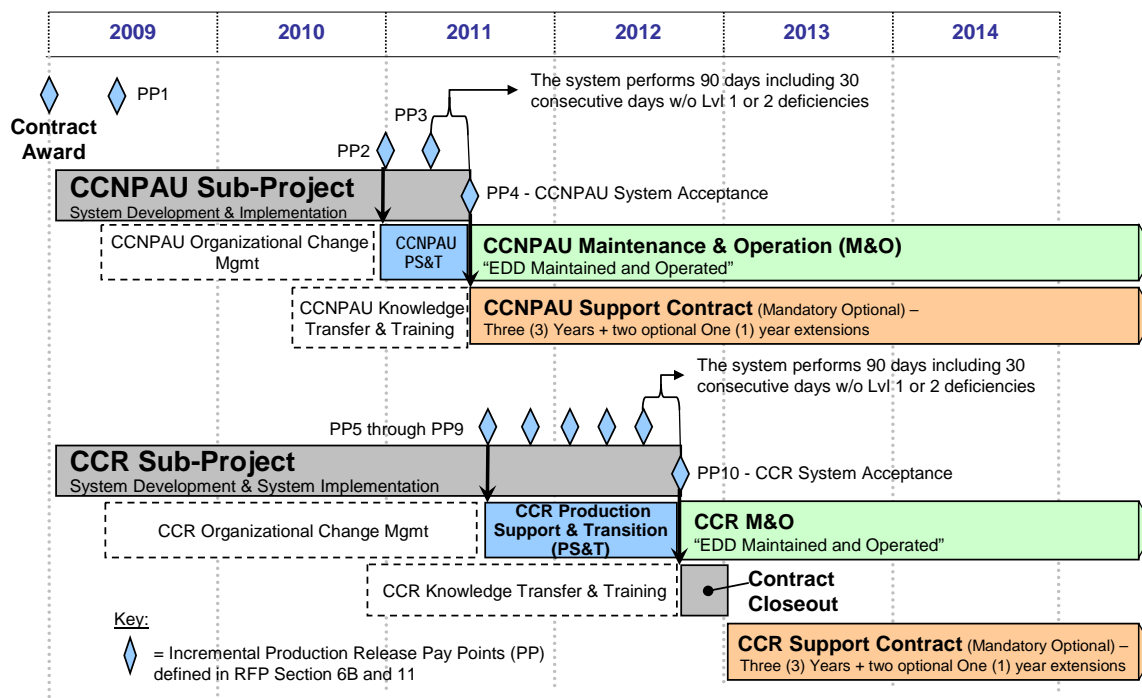
Upon successful completion of any user acceptance testing, UIMOD Project Office will schedule a release to be moved to the Production environment as follows:

Requirement Number	Description	Bidder Agrees (Y/N)
343	The Contractor shall assist the UIMOD Project Office and EDD with testing and release preparation in the pre-production environment.	

344	Upon successful completion of the Pre-Production testing, the contractor shall, in coordination with the UIMOD Project Office, create a Production Release, that shall consist of an updated Pre-Production Release notification, to assist EDD in successfully in releasing and maintaining the system in the Production environment
	
	It must include, but not be limited to the following components:
	  a) Updated Configuration Information required to satisfy the EDD production configuration management requirements
	  b) Updated System Architecture
	  c) Updated Detailed Design, including detailed system technical and user documentation.
	  d) An updated Data Conversion Release document
	  e) Deployment schedule	

6B.10.1 Initial Documentation Release (Pay Point 1)

Requirement Number	Description	Bidder Agrees (Y/N)

345	The Contractor shall provide deliverables that satisfy the requirements assigned to the Pay Point titled "Initial Documentation" which includes the following:
	  a) All deliverables that establish how the Contractor will manage the project (e.g. project management plans, management systems).
	  b) Deliverables such as training plans, equipment lists, and organizational change plans that are due no later than the first 120 days of the contract as stated in RFP Section 6D, Deliverables and Acceptance Process.
	  c) The successful completion of all other work breakdown structure elements, tasks, and deliverables for this Pay Point as specified in the Contractor approved project schedule.
	
	The specific requirements allocated to this Pay Point will be proposed by the Contractor and reviewed and approved by the UIMOD Project Office.	

6B.10.2 CCNPAU Call Center Upgrade (Pay Point 2)

Requirement Number	Description	Bidder Agrees (Y/N)
346	The Contractor shall deliver a CCNPAU Call Center Upgrade production release that includes the following: a) The resolution of all documented contractor-responsible deficiencies associated with the present and any prior Pay Point deliverable as stipulated through the approved deficiency process, and b) A VoIP-based call answering system that extends to fifteen (15) call centers, and satisfies the related CCNPAU sub-project requirements, including skills-based routing and an improve IVR. c) The successful completion of all other work breakdown structure elements, tasks, and deliverables for this Pay Point as specified in the Contractor approved project schedule. The specific requirements allocated to this Pay Point will be proposed by the Contractor and reviewed and approved by the UIMOD Project Office.	

6B.10.3 CCR Phase 1: IVR and Web (Pay Point 3)

Requirement Number	Description	Bidder Agrees (Y/N)
347	The Contractor shall deliver a "CCR Phase 1: IVR and Web" production release that includes the following: a) The resolution of all documented contractor-responsible deficiencies associated with the present and any prior Pay Point deliverables as stipulated through the approved deficiency process, and b) A System that performs simple claimant certification through the IVR and Internet and that matches the functionality as described in Use Case C.3.34 in Appendix C. c) A production internet infrastructure deployed at EDD/DTS. d) The successful completion of all other work breakdown structure elements, tasks, and deliverables for this Pay Point as specified in the Contractor approved project schedule. The specific requirements allocated to this Pay Point will be proposed by the Contractor and reviewed and approved by the UIMOD Project Office.	

6B.10.4 CCNPAU System Acceptance (Pay Point 4)

Requirement Number	Description	Bidder Agrees (Y/N)
348	The Contractor shall provide a fully operational CCNPAU System that includes the following: a) The resolution of all documented contractor-responsible deficiencies associated with the present and any prior Pay Point deliverables as stipulated through the approved deficiency process, and b) The CCNPAU System successfully operates in the production environment for a total of 90 business days, and c) The CCNPAU System successfully performs in the production environment for a period of thirty (30) consecutive business days without any level 1 or level 2 deficiencies. d) The successful completion of all other work breakdown structure elements, tasks, and deliverables for this Pay Point as specified in the Contractor approved project schedule.	
349	Upon successful deployment of the final production release for CCNPAU of the UIMOD system, the Contractor shall provide a traceability matrix identifying all UIMOD CCNPAU system requirements allocated to current, in-production system components. Sign-off of this document by the UIMOD Project Office will complete system development.	
350	Conditions for system acceptance shall also include: a) If the State hosted solution, server systems, including database servers, application servers and Web servers, must be hosted by the State. b) Integration infrastructure must be hosted by the State. c) Change configuration and release management must be provided by the State. d) Wide area network (WAN) must be maintained and supported by the Department of Technology Services (DTS). e) Distributed computing environment including desktops, printers and local area networks (LANs) for State users must be provided by the State. f) The service desk must be provided by the State. g) The State must be able to provide application maintenance, development and testing immediately after acceptance of the CCNPAU sub-system without the Contractor's intervention. h) Disaster recovery services must be provided by the State. i) All ownership of licenses and maintenance contracts must all be transitioned from the Contractor to the State.	

6B.10.5 CCR Phase 2: Internal (Part of Pay Point 5 9 Grouping)

Requirement Number	Description	Bidder Agrees (Y/N)
351	The Contractor shall deliver a "CCR Phase 2:Internal" production release that includes the following: a) The resolution of all documented contractor-responsible deficiencies associated with the present and any prior Pay Point deliverables as stipulated through the approved deficiency process, and b) Provides internal applications for EDD Customer Service Representatives (CSRs) that matches the functionality described in Use Cases C.3.11-C.3.27 and C.3.29-C.3.32 as described in Appendix C and in the corresponding functional requirements in section 6C. c) The successful completion of all other work breakdown structure elements, tasks, and deliverables for this Pay Point as specified in the Contractor approved project schedule. The specific requirements allocated to this Pay Point will be proposed by the Contractor and reviewed and approved by the UIMOD Project Office.	

6B.10.6 CCR Phase 2: External Web (Part of Pay Point 5-9 Grouping6)

Requirement Number	Description	Bidder Agrees (Y/N)
352	The Contractor shall deliver a CCR Phase 2 External Web production release that includes the following: a) The resolution of all documented contractor-responsible deficiencies associated with the present and any prior Pay Point deliverables as stipulated through the approved deficiency process, and b) Provides externally facing, Web-based interactive customer applications that implement the functionality described in Use Cases C.3.1-C.3.10, C.3.28, and C.3.33 as described in Appendix C and in the corresponding functional requirements in section 6C.The successful completion of all other work breakdown structure elements, tasks, and deliverables for this Pay Point as specified in the Contractor approved project schedule. The specific requirements allocated to this Pay Point will be proposed by the Contractor and reviewed and approved by the UIMOD Project Office.	

6B.10.7 CCR Phase 2: External IVR (Part of Pay Point 75-9 Grouping)

Requirement Number	Description	Bidder Agrees (Y/N)
353	The Contractor shall deliver a CCR Phase 2 External IVR production release that includes the following: a) The resolution of all documented contractor-responsible deficiencies associated with the present and any prior Pay Point deliverables as stipulated through the approved deficiency process, and b) Provides externally facing, IVR-based interactive customer applications that implement the functionality described in Use Cases C.3.1-C.3.10, C.3.28, and C.3.33 as described in Appendix C and in the corresponding functional requirements in section 6C.The successful completion of all other work breakdown structure elements, tasks, and deliverables for this Pay Point as specified in the Contractor approved project schedule. The specific requirements allocated to this Pay Point will be proposed by the Contractor and reviewed and approved by the UIMOD Project Office.	

6B.10.8 CCR Business Intelligence (Part of Pay Point 85-9 Grouping)

Requirement Number	Description	Bidder Agrees (Y/N)
354	The Contractor shall deliver a CCR Business Intelligence production release that includes the following: a) The resolution of all documented contractor-responsible deficiencies associated with the present and any prior Pay Point deliverables as stipulated through the approved deficiency process, and b) The system provides the hardware and software for a data warehouse and corresponding data mart that meet the data reporting , data mining, and fraud detection requirements described in the RFP The successful completion of all other work breakdown structure elements, tasks, and deliverables for this Pay Point as specified in the Contractor approved project schedule. The specific requirements allocated to this Pay Point will be proposed by the Contractor and reviewed and approved by the UIMOD Project Office.	

6B.10.9 CCR Web Content Management (Part of Pay Point 5-9 Grouping)

Requirement Number	Description	Bidder Agrees (Y/N)
355	The Contractor shall deliver a CCR Web Content Management production release that includes the following: a) The resolution of all documented contractor-responsible deficiencies associated with the present and any prior Pay Point deliverables as stipulated through the approved deficiency process, and b) The system meets the requirements for content management, archival, and distribution as described in the RFP c) The successful completion of all other work breakdown structure elements, tasks, and deliverables for this Pay Point as specified in the Contractor approved project schedule. The specific requirements allocated to this Pay Point will be proposed by the Contractor and reviewed and approved by the UIMOD Project Office.	

6B.10.10 CCR System Acceptance (Pay Point 10)

Requirement Number	Description	Bidder Agrees (Y/N)
356	The Contractor shall deliver a fully operational CCR System that includes the following: a) The resolution of all documented contractor-responsible deficiencies associated with the present and any prior Pay Point deliverables as stipulated through the approved deficiency process, and b) The CCR System successfully operates in the production environment for a total of 90 business days, and c) The CCR System successfully performs in the production environment for a period of thirty (30) consecutive business days without any level 1 or level 2 deficiencies. d) The successful completion of all other work breakdown structure elements, tasks, and deliverables for this Pay Point as specified in the Contractor approved project schedule.	
357	Upon successful deployment of the final production release for CCR of the UIMOD system, the Contractor shall provide a traceability matrix identifying all UIMOD CCR system requirements allocated to current, in-production system components. Sign-off of this document by the UIMOD Project Office will complete system development.	

Requirement Number	Description	Bidder Agrees (Y/N)
358	Conditions for system acceptance shall also include: Provisioning of services post-implementation shall be as follows: a) If a State hosted solution, server systems, including database servers, application servers and Web servers, must be hosted by the State. b) Integration infrastructure must be hosted by the State. c) Change configuration and release management must be provided by the State. d) Wide area network (WAN) must be maintained and supported by the Department of Technology Services (DTS). e) Distributed computing environment including desktops, printers and local area networks (LANs) for State users must be provided by the State. f) The service desk must be provided by the State. g) Disaster recovery services must be provided by the State. h) The State must be able to provide application maintenance, development and testing immediately after acceptance of the CCR sub-system without the Contractor's intervention. i) Disaster recovery services must be provided by the State. j) All ownership of licenses and maintenance contracts must all be transitioned from the Contractor to the State.	

6B.11 Production Support Requirements

This section covers requirements for the Contractor between the time of the first production release of and the successful completion of System Acceptance.

Since the Project is implemented in phases, the Project will also be transitioned in phases and the processes may be repeated and/or overlapped.

The UIMOD Project will include multiple releases of software and hardware into production. Managing these to avoid service interruptions and ensure that the State can effectively support the new software and equipment is of critical importance.

6B.11.1 General Production Support Requirements

Requirement Number	Description	Bidder Agrees (Y/N)
359	For the duration of this contract, the Contractor shall, at a minimum, provide routine system upgrades and fixes at no additional cost. In addition, the Contractor shall provide field/technical services bulletins periodically as they become available within 24 hours after they receive it from subcontractors, manufacturers, and other third parties.	

Requirement Number	Description	Bidder Agrees (Y/N)
360	The Contractor shall provide the UIMOD Project Office with a list of personnel, contact information, and their area of expertise of who shall be performing system production support.	
361	The Contractor shall repair any corrupted data that is associated with a system problem.	
362	With concurrence from the UIMOD Project Office, the routine planned maintenance activities shall be scheduled during non-business hours. Contractor shall provide the UIMOD Project Office with a copy of the schedule at least 30 days in advance of the scheduled maintenance date for approval.	
363	The testing tools and test configurations shall be provided to the State as the systems are transitioned into support.	
364	The Contractor shall provide instructions and training for EDD support staff that may need to access and support the system remotely.	
365	Service-impacting maintenance shall be performed outside regular business hours unless otherwise agreed to by the parties.	
366	Product upgrading or modification in the telecommunications production environment during Business Hours by the Contractor shall be permitted only with written approval of the UIMOD Project Office (via EDD's Telecommunications Director, the Telecommunications Director's designee, and the designee of UIB). Subject to written approval from the UIMOD Project Office, Contractor shall be authorized to conduct remote diagnostics, review log files and conduct troubleshooting procedures during Business Hours as long as such actions do not impact the telecommunications production environment.	
367	The Contractor shall develop an automated process for purging necessary production system files.	
368	The Contractor shall establish an automated maintenance routine that shall backup the user IDs and password data. The Contractor shall also, as a regular maintenance routine, delete or move to an archive file expired IDs and related data.	
369	Upon completion of any maintenance call, the Contractor shall furnish a maintenance activity report to the UIMOD Project Office within 24 hours, which shall include, at a minimum, the following: a) Date and time notified. b) Date and time of arrival. c) If hardware, type and serial number(s) of machine(s). d) If software, module or component name of the affected software code. e) Time spent for repair. f) List of parts replaced and/or actions taken. g) Description of malfunction or defect.	

Requirement Number	Description	Bidder Agrees (Y/N)
370	The Contractor shall specify in writing the number of hours each item of the UCD system requires per month for Preventive Maintenance and the frequency and duration of such Preventive Maintenance. From this Contractor-supplied information EDD shall develop and provide to the Contractor in writing the schedule within which the Contractor shall provide Preventive Maintenance. This schedule may be modified as mutually agreed to in writing.	
371	Within five (5) working days of a maintenance activity for the UCD system, the Contractor shall furnish a report to EDD that includes: a) Description of the cause of the malfunction. b) Detailed description of the steps to be taken to avoid future reoccurrence(s).	
372	The Contractor shall provide a listing of all equipment and software installed to support the UCD with annotations for scheduled end-of-life and end-of-support.	
373	The Contractor shall provide trend reports of UCD system errors to EDD on a quarterly basis for the preceding quarter and previous twelve months.	
374	Contractor shall stock parts for mission critical UCD equipment in order to meet the Level One maintenance criteria.	

6B.11.2 Service Level Requirements

Processing UI benefit payments, service delivery and maintaining the integrity of the UI Program are priorities for EDD. Any application that provides functionality to support any of these mission critical areas is considered a critical application. Failure of any of these applications can have a significant impact on UI operations and are, therefore, considered a Severity One Level incident. Defects must be corrected promptly to minimize the negative impact on business operations.

In the event of failures, processes must be in place to ensure that service is restored as quickly as possible to minimize the impact on customers and UI operations. The length of time the EDD can tolerate downtime is commensurate with the severity level of the failure as noted below.

Note that the severity levels described below represent the service levels desired by the CCR and CCNPAU sub-systems, not a classification of defect levels. While the definition of defect levels described Table 6B.1 – Defect LevelsTable 6B.1 – Defect Levels does roughly correspond to the definition of the severity levels; they serve different purposes and are not intended to overlap exactly.

Table 6B.3 – Incident Severity Levels

Severity Level	Definition	Resolution Time	
		CCR	**UCD**
One	There is a complete or severe loss of service in at least one mission critical area, the UI business operations cannot reasonably continue or can continue only in a restricted fashion, and service delivery to customers is disrupted.	6 clock hours	8 clock hours
Two	There is a minor loss of service. The impact is an inconvenience and mission critical areas are not significantly impaired. The UI business operations continue with minimal disruption to customers. A workaround, acceptable to EDD, may be employed temporarily to restore service and/or business operations.	24 clock hours	40 business hours
Three	There is a deviation from the standard of performance that causes no loss of service. This may be a minor error, incorrect behavior, or a documentation error that does not impede the operation of a system or effect UI business operations. Customers are not impacted.	40 business hours or as established by the CCB	80 business hours or as established by the CCB

Requirement Number	Description	Bidder Agrees (Y/N)
375	In all instances where the Contractor is responsible for application maintenance or has provided a warranty, the maximum time to restore the functionality of critical applications and resolve Severity Level One incidents shall not exceed six (6) clock hours between the opening of an incident and final closure, unless an extension of time is approved by the UIMOD Project Office.	
376	In all instances where the Contractor is responsible for application maintenance or has provided a warranty, the maximum time to restore the functionality of non-critical applications and resolve Severity Level Two incidents shall not exceed 24 clock hours between the opening of an incident and final closure, unless an extension of time is approved by the UIMOD Project Office.	
377	In all instances where the Contractor is responsible for application maintenance or has provided a warranty, the maximum time to resolve Severity Level Three incidents and restore application functionality shall not exceed 40 business hours between the opening of an incident and final closure, unless an extension of time is approved by the UIMOD Project Office.	

Requirement Number	Description	Bidder Agrees (Y/N)
378	If the UCD equipment fails to operate at an effectiveness level of one hundred percent (100%) for two (2) consecutive months, EDD may, at its sole discretion: a) Require the Contractor to engage presence at EDD-designated site(s) from the Product manufacturer, or other relevant third parties acceptable to EDD and mutually agreed upon by the Contractor and EDD in writing, and/or which such agreement shall not be unreasonably withheld by the Contractor, for direct intervention at the Contractor's cost and at no cost to EDD. b) Require the Contractor to replace the UCD equipment or component, as determined by the Contractor, at no cost to EDD.	

6B.11.3 Additional CCNPAU Service Level Requirements

For the CCNPAU System, the Contractor will be responsible for quality of service (QoS) and uptime for all equipment, software, and network operations with the exception of network data lines that connect the EDD central office to remote locations using the DTS Network. The EDD will initiate a separate Service Level Agreement with the DTS to cover QoS, performance, and reliability of that Network. The UCD System maintenance is defined around severity levels of service.

Severity Levels will be determined and assigned solely by EDD based on the degree and nature of the loss of service to the UI business environment, including its customers. All time responses for levels of services will be based on 24 X 7 UCD system availability, except for scheduled maintenance periods, and 24 X 7 responses to UCD system failures.

In Severity Level One, there is a complete or severe loss of service in at least one mission critical area. An application, platform, function, or feature is considered to be mission critical if it meets one or more of the following criteria:

1. Necessary or required to route or deliver an inbound call to a targeted agent in a given Call Center.
2. Necessary or required to route an outbound call from a user to an external location on the Public Switched Telephone Network or VoIP network.
3. Necessary or required to route or deliver calls within or between Call Centers, sites, or locations.
4. Required to modify, control, administer, or manage the delivery of inbound calls to a targeted agent or other user.
5. Required to provide management information necessary to make accurate and timely decisions regarding management of call volume or Call Center staff.
6. Necessary to provide claimant-related information from a host database to an

agent.

7. Necessary to provide troubleshooting and other performance related information regarding telecommunications components and products.

8. Required to ensure that UI callers receive prescribed call treatment while in queue; necessary to route agent information to UCD immediately.

9. Required to provide voice services to agents and other users.

10. Necessary to route electronic media such as fax, e-mail, images, video, etc., to one or many locations.

11. Necessary to route agent information back to UCD.

12. One or more call centers are down.

Contractor response to Severity Level One is defined in the following UCD System requirements:

Requirement Number	Description	Bidder Agrees (Y/N)
379	Contractor shall meet the maintenance levels described in Table 6B.4 – Severity Level One Criteria Table 6B.4 – Severity Level One Criteria for Level One response to mission critical problems for the UCD system.	

Table 6B.4 – Severity Level One Criteria

Response to Level One Problems	Maximum Allowable Response Time
Problem Reported and Ticket Issued: Ticket issued by Contractor either by notification from EDD, and upon receipt of automated alarm/error notification at Contractor's Operations Center. The Clock starts with initial call.	Initial call
Remote Diagnostics Initiated: Qualified technician assigned for remote diagnosis. Contact initiated to EDD to advise on the status.	15 minutes
Onsite Response: If the problem is not resolved remotely, technician arrives at EDD designated site(s) and informs EDD onsite staff and the EDD Project Manager of their arrival.	2 clock hours from initial call/contact
Resolution Plan Determined: Diagnosis, resolution plan, and estimated fix time given. Contractor initiates a conference call with the Project Manager or designee on an hourly basis.	4 clock hours from initial call/contact
Component and/or Technical Augmentation: Required component(s) shipped in most expedient way and/or additional technical support called in. Contractor initiates conference call. The EDD informed hourly of status.	6 clock hours from initial call/contact

Response to Level One Problems	Maximum Allowable Response Time
Problem Resolved: If the problem is not resolved within eight (8) hours of initial call EDD reserves the right to invoke the liquidated damages for failure to meet guaranteed response times. Contractor initiates conference call(s) per mutual agreement with EDD. The EDD informed hourly of status.	8 clock hours from initial call/contact

In Severity Level Two, there is a minor loss of service. The impact is an inconvenience and mission critical areas are not significantly impaired. The UI business operations continue with minimal disruption to customers.

Requirement Number	Description	Bidder Agrees (Y/N)
380	Contractor shall meet the maintenance levels described in Table 6B.5 – Severity Level Two Criteria Table 6B.5 – Severity Level Two Criteria for Level Two response to problems that disrupt UI business operations with minimal impact on customers of the UCD system.	

Table 6B.5 – Severity Level Two Criteria

Response to Level Two Problems	Maximum Allowable Response Time
Problem Reported and Ticket Issued: Ticket issued by Contractor either by notification from EDD, or upon receipt of automated alarm/error notification at Contractor's Operations Center.	Initial call/contact
Technician Assigned: Qualified technician assigned for remote diagnosis. Contact initiated to EDD to advise on status.	2 business hours from initial call/contact
Onsite Response: If problem is not resolved remotely, technician arrives at EDD designated site(s) and informs EDD onsite staff and the EDD Project Manager of their arrival.	8 business hours from initial call/contact
Resolution Plan Determined: Diagnosis, resolution plan, and estimated fix time given. Contractor initiates conference call with the EDD Project Manager or designee each business day.	16 business hours from initial call/contact
Component and/or Technical Augmentation: Required component(s) shipped in most expedient way and/or additional technical support called in. Contractor initiates conference call with EDD each day on status.	32 business hours from initial call/contact

Response to Level Two Problems	Maximum Allowable Response Time
Problem Resolved: If the problem is not resolved within five (5) business days of initial call EDD reserves the right to invoke the liquidated damages for failure to meet guaranteed response times. Contractor initiates conference call(s) per mutual agreement with EDD. The EDD must be informed each business day of status.	40 business hours from initial call/contact

In Severity Level Three, there is a deviation from the Standard of Performance that causes no loss of service. This may be a minor error, incorrect behavior, or a documentation error that does not impede the operation of a system or effect UI business operations. Customers are not impacted.

Requirement Number	Description	Bidder Agrees (Y/N)
381	The Contractor shall meet the maintenance levels described in Table 6B.6 – Severity Level Three Criteria Table 6B.6 – Severity Level Three Criteria for Level Three response to problems that cause no loss of service but do not meet performance standards for the UCD system.	

Table 6B.6 – Severity Level Three Criteria

Response to Level Three Problems	Maximum Allowable Response Time
Problem Reported and Ticket Issued: Ticket issued by Contractor either by notification from EDD, or upon receipt of automated alarm/error notification at Contractor Operations Center.	Initial call/contact
Staff Assigned: Qualified technician for action assigned. Contact initiated to EDD to advise on status.	8 business hours from initial call/contact
Contractor Contacts EDD: Call made to Customer EDD Project Manager to advise on status.	16 business hours from initial call/contact
Resolution Plan Determined: Diagnosis, resolution plan, and estimated fix time given. The EDD Project Manager informed of status.	36 business hours from initial call/contact
Problem Resolved: If the problem is not resolved within 10 days of initial call EDD reserves the right to request a Contractor initiated conference call. Work shall be continuous without interruption until problem is resolved. The EDD must be informed each Business Day of status.	80 business hours from the initial call/contact

6B.12 CCNPAU & CCR Support Requirements (Mandatory – Optional)

The Contractor shall provide the State with the option to purchase contract support for three (3) years plus two (2) one (1) year extensions for the CCNPAU and CCR sub-projects following system acceptance for each sub-project.

6B.12.1 CCNPAU Support Requirements (Mandatory – Optional)

Requirement Number	Description	Bidder Agrees (Y/N)
382	The Contractor will work with EDD technical and program staff to fix problems, optimize the system, and implement changes to the UCD system and CCR interface. This will include making changes, testing changes, and providing documentation for changes and test results.	
383	The Contractor will respond to critical service requests with a response time not to exceed 2 hours. A critical service request involves failure or degraded operation of a hardware or software component that prevents or seriously impedes EDD in performing work (there is no viable or sufficient workaround, redundancy, or backup capability that permits unimpeded operation).	
384	The Contractor will respond to non-critical service requests with a response time not to exceed 4 hours. A non-critical service request involves failure or degraded operation of a hardware or software component where there is a viable workaround, redundancy, or backup capability that permits continued, satisfactory operation.	
385	The Contractor will participate in all regularly scheduled meetings for the ongoing maintenance and support of the UCD system and CCR interface. Attendance will be in person when available locally and through conference call when unavailable locally.	
386	The Contractor will participate in all regularly scheduled meetings for the enhancement of the UCD system and CCR interface. Attendance will be in person when available locally and through conference call when unavailable locally.	

6B.12.2 CCR Support Requirements (Mandatory – Optional)

Requirement Number	Description	Bidder Agrees (Y/N)
387	The Contractor will work with EDD technical and program staff to fix problems, optimize the system, and implement changes to the internal CCR system, external CCR web system, CCR IVR system, CCR Business Intelligence system, and Web Content Management system. This will include making changes, testing changes, and providing documentation for changes and test results.	

Requirement Number	Description	Bidder Agrees (Y/N)
388	The Contractor will respond to critical service requests with a response time not to exceed 2 hours. A critical service request involves failure or degraded operation of a hardware or software component that prevents or seriously impedes EDD in performing work (there is no viable or sufficient workaround, redundancy, or backup capability that permits unimpeded operation).	
389	The Contractor will respond to non-critical service requests with a response time not to exceed 4 hours. A non-critical service request involves failure or degraded operation of a hardware or software component where there is a viable workaround, redundancy, or backup capability that permits continued, satisfactory operation.	
390	The Contractor will participate in all regularly scheduled meetings for the ongoing maintenance and support of the internal CCR system, external CCR web system, CCR IVR system, CCR Business Intelligence system, and Web Content Management system. Attendance will be in person when available locally and through conference call when unavailable locally.	
391	The Contractor will participate in all regularly scheduled meetings for the enhancement of the internal CCR system, external CCR web system, CCR IVR system, CCR Business Intelligence system, and Web Content Management system. Attendance will be in person when available locally and through conference call when unavailable locally.	